

KF
2531
A3
1907

From the Library of the Late

ROBERTS WALKER

Friend and Partner of Justin DuPratt White (Cornell '90)

Presented to Cornell University

In Memory of That Relationship

by

MR. WALKER'S FAMILY

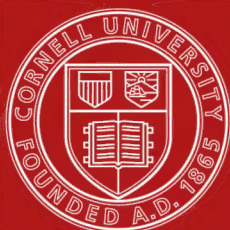
Cornell University Library
KF 2531.A3 1907

Laws of the United States relating to th



3 1924 017 140 124

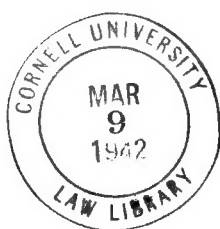
law



Cornell University Library

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.





U. S. Laws, statutes, etc.

LAWS OF THE UNITED STATES

RELATING TO THE

IMPROVEMENT OF RIVERS AND HARBORS

FROM

AUGUST 11, 1790, TO MARCH 4, 1907

COMPILED IN THE

OFFICE OF THE CHIEF OF ENGINEERS, U. S. ARMY

IN TWO VOLUMES

VOLUME I

From 1790 to 1889

WASHINGTON

GOVERNMENT PRINTING OFFICE

1907

B 57254

WAR DEPARTMENT,

Document No. 249.

OFFICE OF THE CHIEF OF ENGINEERS.



CONTENTS.

[Alphabetical index will be found at end of each volume.]

VOLUME I.

	Page.
Letter of transmittal.....	13
Laws.....	15
August 11, 1790 (tonnage duties).....	15
January 10, 1791 (tonnage duties).....	16
March 19, 1792 (tonnage duties).....	16
May 12, 1796 (tonnage duties).....	16
March 27, 1798 (Kennebunk River, Me.).....	17
March 17, 1800 (tonnage duties).....	17
April 6, 1802 (Delaware River).....	18
March 16, 1804 (James River, Va.).....	18
March 1, 1805 (Delaware River).....	18, 19
February 28, 1806 (Delaware River).....	19
April 18, 1806 (Delaware River).....	19
April 20, 1808 (tonnage duties).....	20
February 10, 1809 (Carondelet Canal, La.).....	20
April 16, 1814 (tonnage duties).....	20
April 26, 1816 (James River, Va.).....	21
February 15, 1819 (tributaries of Mississippi River).....	21
March 2, 1819 (admission of Alabama into the Union).....	21
April 14, 1820 (Mississippi River and tributaries, including the Ohio).....	22
May 1, 1820 (contracts and land).....	23
March 3, 1821 (Thames River, Conn.).....	23
March 3, 1821 (Isles of Shoals (Gosport Harbor) and Portsmouth Harbor, N. H.).....	23
April 20, 1822 (tonnage duties).....	24
May 7, 1822 (Isles of Shoals (Gosport Harbor), N. H., and Delaware Breakwater, Del.).....	24, 25
March 3, 1823 (Gloucester and Annisquam harbors, Mass., and Erie Harbor, Pa.).....	25
April 30, 1824 (canals).....	26
May 13, 1824 (Coosa and Tennessee rivers, etc.).....	26
May 24, 1824 (Ohio and Mississippi rivers).....	27
May 26, 1824 (Erie Harbor, Pa., and Plymouth beach, Mass.).....	28
February 21, 1825 (surveys, etc.).....	28
March 2, 1825 (Boston Harbor, Mass.).....	29
March 3, 1825 (Appomattox River, Va.).....	29
March 3, 1825 (Chesapeake and Delaware Canal).....	29
March 3, 1825 (rivers and harbors).....	30
March 3, 1826 (canal across Florida).....	30
March 14, 1826 (rivers and harbors in Mississippi).....	31
March 25, 1826 (rivers and harbors).....	31
May 13, 1826 (Louisville and Portland Canal).....	31
May 18, 1826 (Dismal Swamp Canal).....	32
May 18, 1826 (Savannah Harbor, Ga.).....	33
May 20, 1826 (rivers and harbors).....	33
March 2, 1827 (rivers and harbors).....	35
March 2, 1827 (Mosquito Lagoon and Indian River, Fla.).....	36
March 2, 1827 (rivers and harbors).....	36
March 2, 1827 (Chester Harbor, Pa.).....	38
March 2, 1827 (Illinois and Michigan Canal).....	38
March 2, 1827 (Wabash and Erie Canal).....	39
March 3, 1827 (Ohio River).....	40
March 10, 1828 (Baltimore Harbor, Md.).....	41

Laws—Continued.	Page.
March 19, 1828 (Boston Harbor, Mass.)	41
May 19, 1828 (rivers and harbors)	41
May 23, 1828 (rivers and harbors)	42
May 23, 1828 (Tennessee, Coosa, Cahaba, and Black Warrior rivers)	44
May 23, 1828 (Delaware Breakwater, Del.)	45
May 24, 1828 (Chesapeake and Ohio Canal)	45
May 24, 1828 (Cahaba Navigation Company)	46
March 2, 1829 (rivers and harbors)	46
March 2, 1829 (harbors at Provincetown, Mass., Mobile, Ala., and New-castle, Del.)	49
March 2, 1829 (Chesapeake and Delaware and Dismal Swamp canals)	49
March 2, 1829 (examinations and surveys)	50
March 2, 1829 (Louisville and Portland Canal)	50
March 2, 1829 (Boston Harbor, Mass.)	50
March 3, 1829 (rivers and harbors)	51
April 23, 1830 (rivers and harbors)	52
April 24, 1830 (Tennessee River)	53
April 30, 1830 (Saugatuck River, Conn., and La Plaisance Bay, Mich.)	53
May 31, 1830 (examinations and surveys, including canal across Florida)	54
February 12, 1831 (Tennessee River)	54
March 2, 1831 (Boston Harbor, Mass.)	55
March 2, 1831 (rivers and harbors)	55
March 2, 1831 (examinations and surveys and Ohio and Mississippi rivers)	57
February 24, 1832 (Boston Harbor, Mass.)	58
July 3, 1832 (rivers and harbors)	58
July 4, 1832 (canals along coasts of Florida and Alabama)	61
July 16, 1832 (Tennessee River)	61
March 2, 1833 (Savannah Harbor, Ga.)	62
March 2, 1833 (rivers and harbors)	62
March 2, 1833 (Potomac River)	63
March 2, 1833 (rivers and harbors)	63
March 2, 1833 (Tennessee River)	64
March 2, 1833 (Savannah Harbor, Ga.)	65
June 25, 1834 (Shenandoah and Potomac rivers)	65
June 27, 1834 (harbors at Stonington, Conn., and St. Augustine, Fla.)	66
June 28, 1834 (rivers and harbors)	66
June 30, 1834 (Wabash and Erie Canal)	68
June 30, 1834 (Apalachicola Bay, Fla.)	69
June 30, 1834 (Hudson River, N. Y.)	69
June 30, 1834 (Ohio and Mississippi rivers)	69
February 24, 1835 (Monroe Harbor, Mich.)	70
February 24, 1835 (Oklawaha, Chattahoochee, and Chipola rivers)	70
March 3, 1835 (rivers and harbors)	70
March 3, 1835 (examinations and surveys)	72
June 23, 1836 (Tennessee, Coosa, Cahaba, and Black Warrior rivers)	73
June 23, 1836 (Delaware Breakwater, Del.)	73
July 2, 1836 (rivers and harbors)	73
July 4, 1836 (rivers and harbors)	76
March 3, 1837 (rivers and harbors)	79
March 3, 1837 (examinations and surveys)	83
March 19, 1838 (Baltimore Harbor, Md.)	83
April 20, 1838 (Red River, La. and Ark.)	84
July 7, 1838 (surveys)	84
July 7, 1838 (rivers and harbors)	84
July 7, 1838 (Rock, Des Moines, and Iowa rivers)	88
March 3, 1839 (Fox and Wisconsin rivers)	88
March 3, 1839 (Fox River)	88
March 3, 1839 (Suwanee and Yellow (Yellowwater) rivers, Fla.)	89
March 3, 1839 (Apalachicola Bay, Fla., and Saybrook Harbor, Conn.)	89
March 3, 1839 (Red Cedar River, Iowa)	90
May 8, 1840 (Apalachicola Bay, Fla.)	90
July 20, 1840 (Kennebec River, Me.)	90
February 27, 1841 (Wabash and Erie Canal)	90
March 3, 1841 (harbors at Boston, Mass., and St. Augustine, Fla.)	91
March 3, 1841 (Lake Michigan)	91
March 3, 1841 (Red River, La. and Ark.)	92

Laws—Continued.

	Page.
September 4, 1841 (proceeds of sales of certain public lands)	92
September 9, 1841 (St. Augustine Harbor, Fla., surveys, etc.)	94
September 11, 1841 (acquisition of land)	95
June 4, 1842 (Merrimac River, Mass.)	96
August 23, 1842 (rivers and harbors)	96
August 31, 1842 (Boston Harbor, Mass.)	96
February 24, 1843 (Baltimore Harbor, Md.)	97
March 1, 1843 (Albemarle Sound to the Atlantic, and Mississippi River and tributaries)	97
March 1, 1843 (Saybrook Harbor, Conn.)	98
March 3, 1843 (Boston Harbor, Mass.)	98
March 3, 1843 (harbors on Lake Michigan)	99
March 3, 1843 (Plattsburg Harbor, N. Y.)	99
June 11, 1844 (rivers and harbors)	100
June 15, 1844 (Grant River, Wis.)	101
June 15, 1844 (Southport (Kenosha) Harbor, Wis.)	102
June 15, 1844 (Racine Harbor, Wis.)	102
June 15, 1844 (Dubuque Harbor, Iowa)	103
June 15, 1844 (rivers in Florida)	103
June 15, 1844 (Nantucket Harbor, Mass.)	103
June 15, 1844 (Barcelona (Portland) Harbor, N. Y.)	104
June 15, 1844 (Nantucket Harbor, Mass.)	104
June 15, 1844 (Nantucket Harbor, Mass.)	104
June 17, 1844 (estimates)	105
February 13, 1845 (Rockport breakwater, Sandy Bay, Cape Ann, Mass.) ..	106
February 26, 1845 (Dismal Swamp Canal)	106
March 3, 1845 (Wabash and Erie Canal)	106
March 3, 1845 (Red River, La. and Ark.)	108
March 3, 1845 (St. Augustine Harbor, Fla.)	108
March 3, 1845 (Southport (Kenosha) Harbor, Wis.)	108
March 3, 1845 (Dubuque Harbor, Iowa)	109
August 8, 1846 (Des Moines River, Iowa)	109
August 8, 1846 (Fox and Wisconsin rivers)	110
August 10, 1846 (rivers and harbors)	111
March 2, 1847 (Cape Fear River, N. C., and Red River, La. and Ark.) ...	112
March 3, 1847 (Ohio River)	112
March 3, 1847 (James River, Va.)	113
March 3, 1847 (Rockport breakwater, Sandy Bay, Cape Ann, Mass.)	113
July 20, 1848 (Boston Harbor, Mass.)	113
August 11, 1848 (proceeds of sales of public lands in Alabama)	114
March 2, 1849 (Fox and Wisconsin rivers)	114
March 3, 1849 (Potomac River)	115
March 3, 1849 (St. Augustine Harbor, Fla.)	115
March 3, 1849 (Ohio River at Wells Island)	115
June 5, 1850 (Baltimore Harbor, Md.)	116
September 30, 1850 (Mississippi River delta)	116
June 19, 1852 (Minnesota (St. Peters) River, Minn.)	117
July 21, 1852 (Chicago River, Ill.)	117
August 26, 1852 (St. Marys Falls Canal)	117
August 30, 1852 (rivers and harbors)	119
August 31, 1852 (Mississippi River delta)	125
January 7, 1853 (Red River, La. and Ark.)	125
January 20, 1853 (Providence River, R. I.)	125
March 3, 1853 (harbors)	126
March 3, 1853 (Lake Huron to falls of St. Marys River)	126
July 22, 1854 (Cape Fear River, N. C.)	127
August 3, 1854 (Fox and Wisconsin rivers)	127
August 5, 1854 (Red River, La. and Ark., and Mississippi River delta) ...	127
February 14, 1855 (Albemarle Sound to the Atlantic)	128
March 2, 1855 (harbors at Michigan City, Ind., and Buffalo, N. Y.)	128
March 3, 1855 (Savannah Harbor, Ga.)	129
March 3, 1855 (Lakes Champlain, Erie, Michigan, and Ontario)	129
March 3, 1855 (Northern and Northwestern Lakes)	130
March 3, 1855 (Fox and Wisconsin rivers)	130
May 12, 1856 (Sheboygan Harbor, Wis.)	130
July 8, 1856 (Southwest Pass and Pass a Loutre, Mississippi River)	131

Laws—Continued.

Page.

July 8, 1856 (St. Marys River, Mich.)	132
July 8, 1856 (St. Clair flats, Mich.)	133
August 7, 1856 (Savannah Harbor, Ga.)	134
August 16, 1856 (Baltimore Harbor, Md.)	134
August 16, 1856 (Des Moines Rapids, Mississippi River)	135
February 26, 1857 (admission of Minnesota into the Union)	136
March 3, 1857 (Mobile Harbor, Ala.)	137
June 7, 1858 (Owlishead Harbor, Me.)	137
June 9, 1858 (Fox and Wisconsin rivers)	137
June 9, 1858 (St. Marys River, Mich.)	138
February 9, 1859 (Ashtabula Harbor, Ohio)	138
February 14, 1859 (admission of Oregon into the Union)	138
May 24, 1860 (Louisville and Portland Canal)	139
June 9, 1860 (Tennessee River)	140
June 12, 1860 (Tennessee River)	140
January 19, 1861 (Baltimore Harbor, Md.)	140
January 29, 1861 (admission of Kansas into the Union)	141
February 21, 1861 (Red River, La., Ark., and Tex.)	142
January 16, 1864 (Chicago Harbor, Ill.)	143
April 9, 1864 (Little Sodus Bay, N. Y.)	143
April 9, 1864 (Little Sodus Bay, N. Y.)	143
April 9, 1864 (Little Sodus Bay, N. Y.)	144
May 19, 1864 (Burlington Harbor, Vt.)	144
June 28, 1864 (rivers and harbors)	144
July 1, 1864 (Milwaukee and Rock River Canal)	145
July 2, 1864 (harbors at Boston, Mass., and Buffalo, N. Y.)	146
February 28, 1865 (Boston Harbor, Mass.)	147
February 28, 1865 (Michigan City Harbor, Ind.)	147
March 3, 1865 (Keweenaw Point waterway, Mich.)	148
April 10, 1866 (Sturgeon Bay and Lake Michigan Canal)	149
June 12, 1866 (Boston Harbor, Mass.)	150
June 23, 1866 (rivers and harbors)	151
July 3, 1866 (Lac La Belle Harbor, Mich.)	157
July 3, 1866 (Keweenaw Point waterway, Mich.)	158
July 3, 1866 (Cleveland Harbor, Ohio)	158
July 25, 1866 (Dismal Swamp Canal)	159
July 28, 1866 (Provincetown Harbor, Mass.)	159
January 29, 1867 (steamship Scotland)	159
March 2, 1867 (rivers and harbors)	160
March 2, 1867 (Westport Harbor and Thames River, Conn.)	166
March 12, 1867 (Fox and Wisconsin rivers)	166
March 16, 1867 (steamship Scotland)	166
March 22, 1867 (Lake Erie to lake Ontario)	167
March 29, 1867 (Falls of Ohio River, including Louisville and Portland Canal)	167
March 29, 1867 (mouth of Mississippi River)	167
March 29, 1867 (western and northwestern rivers)	168
January 11, 1868 (Dismal Swamp Canal)	168
March 2, 1868 (steamship Scotland)	168
June 5, 1868 (Portland Harbor, Me.)	169
July 20, 1868 (Des Moines and Rock Island rapids, Mississippi River)	169
July 23, 1868 (Mississippi River at Meekers Island, Minn.)	170
July 25, 1868 (rivers and harbors)	171
July 27, 1868 (examinations and surveys)	175
July 27, 1868 (Oswego Harbor, N. Y.)	176
April 10, 1869 (rivers and harbors)	176
April 10, 1869 (Keweenaw Point waterway, Mich.)	178
December 23, 1869 (Des Moines Rapids, Mississippi River)	178
January 20, 1870 (Des Moines River, Iowa)	178
April 13, 1870 (Cleveland Harbor, Ohio)	178
April 20, 1870 (Black Rock Harbor and Niagara River, Buffalo, N. Y.)	179
May 5, 1870 (Bayou Teche, La.)	179
May 6, 1870 (Iowa River, Iowa)	179
July 7, 1870 (Fox and Wisconsin rivers)	180
July 11, 1870 (rivers and harbors)	181
July 15, 1870 (rivers and harbors)	187

Laws—Continued.

Page.

January 18, 1871 (Louisville and Portland Canal and Des Moines Rapids, Mississippi River)	188
February 2, 1871 (St. Marys River and St. Marys Falls Canal)	188
February 21, 1871 (lower Mississippi River and tributaries)	189
March 2, 1871 (Keweenaw Point waterway, Mich.)	189
March 3, 1871 (Louisville and Portland Canal)	190
March 3, 1871 (rivers and harbors)	190
March 3, 1871 (Des Moines Rapids, Mississippi River)	197
April 15, 1871 (Buffalo Harbor, N. Y.)	197
April 20, 1871 (Delaware Bay at Lewes, Del.)	198
March 1, 1872 (Sturgeon Bay and Lake Michigan Canal)	198
March 5, 1872 (Potomac and Anacostia rivers, D. C.)	198
March 27, 1872 (Keweenaw Point waterway, Mich.)	199
April 26, 1872 (Oswego Harbor, N. Y.)	199
May 18, 1872 (Delaware Bay at Lewes, Del.)	199
May 21, 1872 (Black Rock Harbor and Niagara River, Buffalo, N. Y.) ...	200
May 27, 1872 (Presque Isle Peninsula, Erie Harbor, Pa.)	200
June 8, 1872 (Louisville and Portland Canal)	200
June 10, 1872 (Fox River, Wis.)	201
June 10, 1872 (rivers and harbors)	201
January 8, 1873 (schooner Charles H. Moller)	210
January 23, 1873 (Mississippi, Missouri, and Arkansas rivers)	211
January 24, 1873 (Coosa River, Ala.)	211
March 3, 1873 (rivers and harbors)	211
March 3, 1873 (Mississippi River)	220
March 3, 1873 (Keweenaw Point waterway, Mich.)	220
March 3, 1873 (Southwest Pass, Mississippi River)	221
March 3, 1873 (Dunkirk Harbor, N. Y.)	221
February 25, 1874 (Buffalo Harbor, N. Y.)	221
February 27, 1874 (Savannah Harbor, Ga.)	222
April 3, 1874 (mouth of Mississippi River)	222
May 11, 1874 (Louisville and Portland Canal)	222
June 1, 1874 (mouth of Mississippi River)	224
June 20, 1874 (unexpended balances)	225
June 22, 1874 (alluvial basin of Mississippi River)	226
June 23, 1874 (Au Sable River, Mich.)	226
June 23, 1874 (rivers and harbors)	227
June 23, 1874 (Oostenaula River, Ga.)	236
March 3, 1875 (rivers and harbors)	236
March 3, 1875 (admission of Colorado into the Union)	251
March 3, 1875 (rights of way through public lands)	251
March 3, 1875 (Fox and Wisconsin rivers)	252
March 3, 1875 (Mississippi River)	253
May 1, 1876 (South Pass, Mississippi River)	253
June 12, 1876 (Ohio River at Neville Island, Pa.)	253
July 12, 1876 (Oconto River, Wis.)	254
July 31, 1876 (Rio Grande at Fort Brown, Tex.)	254
August 14, 1876 (rivers and harbors)	254
March 3, 1877 (South Pass, Mississippi River)	263
December 15, 1877 (Mississippi River reservoirs)	263
February 7, 1878 (Mississippi, Missouri, Arkansas, and Red rivers)	264
April 10, 1878 (bids for contracts)	264
April 30, 1878 (Des Moines Rapids Canal)	265
June 7, 1878 (Galveston Harbor, Tex.)	265
June 14, 1878 (western and northwestern rivers)	265
June 15, 1878 (Barataria Ship Canal)	266
June 18, 1878 (rivers and harbors)	267
June 19, 1878 (South Pass, Mississippi River)	281
June 20, 1878 (Connecticut, Fox, Wisconsin, and Mississippi rivers)	283
June 20, 1878 (dredge boat McAlester)	284
January 13, 1879 (Muscle Shoals Canal)	284
March 3, 1879 (rivers and harbors)	284
May 13, 1879 (South Pass, Mississippi River)	302
June 10, 1879 (Kanawha and Kentucky rivers)	302
June 14, 1879 (Choctawhatchee River, Ala.)	303
June 19, 1879 (Chippewa River, Wis.)	303

Laws—Continued.	Page.
June 28, 1879 (Mississippi River Commission)	304
June 28, 1879 (Mississippi River)	306
January 23, 1880 (Delaware Bay and River)	306
May 18, 1880 (Louisville and Portland Canal)	306
June 14, 1880 (rivers and harbors)	307
June 16, 1880 (Fox and Wisconsin rivers)	330
June 16, 1880 (Mississippi River Commission)	331
June 16, 1880 (Mississippi River)	331
January 13, 1881 (Henry M. Shreve)	332
March 3, 1881 (Mississippi River Commission and Chesapeake and Delaware Canal)	332
March 3, 1881 (rivers and harbors)	333
March 4, 1882 (Galveston Harbor, Tex.)	356
March 6, 1882 (Susquehanna River, Md.)	356
March 21, 1882 (Davis Island dam, Ohio River)	356
May 1, 1882 (St. Croix River, Wis. and Minn.)	357
May 4, 1882 (Hell Gate, East River, N. Y.)	357
June 19, 1882 (Sandbeach (Harbor Beach) Harbor, Mich.)	357
July 31, 1882 (Lake Pontchartrain, La)	359
August 2, 1882 (rivers and harbors)	360
August 7, 1882 (Mississippi River Commission and Portsmouth Harbor, N. H.)	390
August 7, 1882 (Fox River, Wis.)	391
March 3, 1883 (Fox and Wisconsin rivers)	392
March 3, 1883 (Mississippi River Commission)	392
January 19, 1884 (Mississippi River Commission)	393
March 12, 1884 (Mississippi River)	393
May 1, 1884 (voluntary and personal services)	394
June 11, 1884 (Davis Island dam, Ohio River)	394
June 26, 1884 (St. Marys Falls Canal)	395
July 5, 1884 (rivers and harbors)	395
July 5, 1884 (Mississippi River at St. Cloud, Minn.)	424
July 7, 1884 (Mississippi River Commission and Connecticut River)	425
December 20, 1884 (Newport Harbor, R. I.)	426
March 3, 1885 (Fox and Wisconsin rivers)	426
March 3, 1885 (Connecticut River)	426, 427
April 15, 1886 (Mississippi River at Brainerd, Minn.)	427
May 1, 1886 (Louisville and Portland Canal)	428
May 1, 1886 (Schuylkill River, Pa.)	429
May 26, 1886 (South Pass, Mississippi River)	429
July 3, 1886 (Mississippi River at Little Falls, Minn.)	429
August 2, 1886 (Kentucky River, Ky.)	430
August 4, 1886 (Fox, Wisconsin, and Umpqua rivers)	430
August 5, 1886 (rivers and harbors)	435
August 5, 1886 (Potomac River, D. C.)	470
February 28, 1887 (Kanawha River, W. Va.)	470
February 1, 1888 (Kanawha, Fox, and Wisconsin rivers)	471
March 5, 1888 (harbor at Philadelphia, Pa., and Camden, N. J.)	477
March 30, 1888 (South Pass, Mississippi River)	478
April 2, 1888 (Mississippi River between Milton and Raleigh, La.)	479
April 24, 1888 (acquisition of land)	479
May 9, 1888 (Chicago Harbor, Ill.)	480
May 16, 1888 (New York Harbor, N. Y.)	480
May 21, 1888 (New Rochelle Harbor, N. Y.)	480
June 29, 1888 (New York Harbor, N. Y.)	481
August 11, 1888 (rivers and harbors)	483
August 13, 1888 (Ohio and Salt rivers)	529
August 21, 1888 (mouth of Brazos River, Tex.)	530
September 10, 1888 (Mississippi River reservoirs)	532
September 26, 1888 (canal rules and regulations)	533
October 1, 1888 (mining débris in California)	533
October 1, 1888 (Fairport Harbor, Ohio)	534
October 2, 1888 (Mississippi River Commission)	534
October 19, 1888 (rivers)	534
January 30, 1889 (Mississippi River reservoirs)	536
February 14, 1889 (Wabash River and tributaries, Ill.)	536

Laws—Continued.

	Page.
February 14, 1889 (South Pass, Mississippi River)	537
March 2, 1889 (Ohio River)	537
March 2, 1889 (Lakeview (Chicago) Harbor, Ill.)	538
March 2, 1889 (Missouri River at Winthrop, Mo.)	538
March 2, 1889 (New York Harbor, N. Y., and deep-water harbor, Gulf of Mexico)	539
December 21, 1889 (Sacramento and Feather rivers)	540

VOLUME II.

February 22, 1890 (Missouri River Commission and Columbia River)	540
March 17, 1890 (Milwaukee Harbor, Wis.)	541
April 3, 1890 (Mississippi River Commission)	541
April 4, 1890 (Delaware Bay at Lewes, Del.)	541
May 12, 1890 (Aransas Pass, Tex.)	542
June 20, 1890 (Portage Lake, Houghton County, Mich.)	543
June 20, 1890 (Mississippi River reservoirs)	544
August 30, 1890 (New York Harbor, N. Y.)	545
September 19, 1890 (rivers and harbors)	545
September 27, 1890 (Rio Grande at Eagle Pass, Tex.)	597
September 29, 1890 (Illinois River, Ill.)	598
September 30, 1890 (Rio Grande at Eagle Pass, Tex.)	598
September 30, 1890 (rivers)	599
September 30, 1890 (Louisville and Portland Canal)	601
October 1, 1890 (Chicago Harbor, Ill.)	602
January 19, 1891 (Ohio River)	603
February 9, 1891 (Padre Island Harbor, Tex.)	603
February 13, 1891 (New York Harbor, N. Y.)	605
February 13, 1891 (mouth of Columbia River)	606
February 21, 1891 (commercial statistics)	607
March 3, 1891 (Lynnhaven Bay, Va.)	607
March 3, 1891 (Mississippi River Commission)	607
March 3, 1891 (rivers and harbors)	608
March 3, 1891 (Columbia River at the Cascades)	609
March 3, 1891 (Mississippi River Commission)	609
February 25, 1892 (mining débris in California)	610
June 6, 1892 (Kansas River, Kans.)	610
June 30, 1892 (Louisville and Portland Canal)	611
July 13, 1892 (rivers and harbors)	611
July 23, 1892 (Davis Island dam, Ohio River)	650
July 27, 1892 (harbor at Ropes Pass, Tex.)	651
July 27, 1892 (Brunswick outer bar, Ga.)	652
July 28, 1892 (rivers and harbors)	654
July 28, 1892 (leasing of public property)	655
August 5, 1892 (rivers and harbors)	655
January 6, 1893 (Delaware River at Fort Mifflin)	656
January 23, 1893 (Padre Island Harbor, Tex.)	657
February 3, 1893 (Great Lakes)	657
February 6, 1893 (Chicago Harbor, Ill.)	657
February 23, 1893 (Erie Harbor, Pa.)	658
February 24, 1893 (Conneaut Harbor, Ohio)	658
March 1, 1893 (California Débris Commission)	659
March 1, 1893 (Brunswick outer bar, Ga.)	666
March 3, 1893 (sundry civil act)	667
March 3, 1893 (deficiency act)	669
January 22, 1894 (Aransas Pass, Tex.)	671
January 22, 1894 (Kansas River, Kans.)	672
February 24, 1894 (Mississippi River between Nauvoo and Hamilton, Ill.)	672
April 21, 1894 (New York Harbor, N. Y.)	673
May 4, 1894 (Mississippi River at Walnut Bend, Ark.)	673
June 8, 1894 (Missouri River)	674
June 23, 1894 (Bar Harbor, Me.)	675
June 29, 1894 (harbor at Superior, Wis., and Duluth, Minn.)	675
July 6, 1894 (Mississippi River at Minneapolis, Minn.)	675
August 8, 1894 (Fairport Harbor, Ohio)	676
August 13, 1894 (protection of persons furnishing materials and labor) ...	676
August 18, 1894 (river and harbor act)	677

Laws—Continued.

	Page.
August 18, 1894 (sundry civil act)	725
August 23, 1894 (rivers)	727
August 23, 1894 (Chicago Harbor, Ill.)	728
August 23, 1894 (Rappahannock River, Va.)	728
December 24, 1894 (Lake Erie to Ohio River)	729
January 25, 1895 (Galveston Harbor, Tex.)	729
February 1, 1895 (Everett Harbor, Wash.)	729
February 13, 1895 (Kalamazoo River (Saugatuck Harbor), Mich.)	730
February 18, 1895 (St. Joseph and Benton harbors, Mich.)	730
March 2, 1895 (Indian River Inlet, Fla.)	730
March 2, 1895 (rivers and harbors)	731
March 2, 1895 (Monongahela River, Pa.)	735
January 21, 1896 (Atansas Pass, Tex.)	736
February 26, 1896 (New York and Galveston harbors and Jupiter Inlet)	736
February 26, 1896 (Biscayne Bay and Palmbeach Harbor, Fla.)	737
March 2, 1896 (Manitowoc Harbor, Wis.)	737
March 11, 1896 (Newtown Creek, N. Y.)	737
March 13, 1896 (Conneaut Harbor, Ohio)	738
March 16, 1896 (Mobile Harbor, Ala.)	738
March 20, 1896 (Marquette harbor of refuge, Mich.)	738
March 23, 1896 (Cleveland Harbor, Ohio)	739
March 24, 1896 (Norfolk Harbor, including Western Branch of Elizabeth River, Va.)	739
March 24, 1896 (Fairport Harbor, Ohio)	739
April 6, 1896 (Cascades Canal, Columbia River)	740
April 6, 1896 (Providence River and Narragansett Bay)	740
April 10, 1896 (Portland Harbor, Me.)	740
April 18, 1896 (Puget Sound-Lake Washington waterway)	741
April 18, 1896 (Missouri River opposite Sioux City, Iowa)	741
April 24, 1896 (Erie Harbor, Pa.)	741
May 1, 1896 (Big Sandy River, Ky.)	742
May 11, 1896 (Erie Harbor, Pa.)	742
May 19, 1896 (Potomac River and tributaries, D. C.)	743
June 3, 1896 (rivers and harbors)	743
June 11, 1896 (rivers and harbors)	804
June 11, 1896 (St. Marys Falls Canal)	805
February 1, 1897 (Galveston Bay and Buffalo Bayou, Tex.)	806
February 17, 1897 (San Pedro and Santa Monica bays, Cal.)	806
February 17, 1897 (East Chester Creek, N. Y.)	807
February 26, 1897 (Pass a Loutre, Mississippi River)	807
March 31, 1897 (Mississippi River Commission)	808
June 4, 1897 (rivers and harbors)	808
July 19, 1897 (rivers and harbors)	817
February 17, 1898 (Southwest Pass, Mississippi River)	819
February 17, 1898 (Sabine Pass Harbor, Tex.)	820
March 5, 1898 (Mississippi River between Coon Rapids and Minneapolis, Minn.)	820
March 5, 1898 (Double Bayou and Galveston Bay, Tex.)	821
April 11, 1898 (Rouge River, Mich.)	821
April 11, 1898 (Anacostia River, D. C.)	822
April 29, 1898 (West Fork River, W. Va.)	822
May 4, 1898 (Elk River, Tenn. and Ala.)	822
May 4, 1898 (Rainy River, Minn.)	823
May 7, 1898 (Humboldt Harbor, Cal.)	824
May 7, 1898 (Hillsboro Bay and River, Fla.)	824
May 7, 1898 (Horn Island Pass and Harbor, Miss.)	824
May 14, 1898 (rights of way, etc., in Alaska)	825
May 28, 1898 (Port Arthur Canal and Sabine Pass Harbor, Tex.)	925
June 4, 1898 (Tampa Bay, Fla.)	826
June 8, 1898 (Sheboygan Harbor, Wis.)	826
June 16, 1898 (Wallabout Channel, East River, N. Y.)	826
June 16, 1898 (Ship Island Pass and channels to Gulfport and Biloxi, Miss.)	827
July 1, 1898 (rivers and harbors)	827
July 1, 1898 (San Joaquin River and Stockton and Mormon channels, Cal.)	833
July 7, 1898 (rivers and harbors)	834
December 21, 1898, concurrent resolution (Deep Creek, Va.)	836
December 21, 1898, concurrent resolution (Cape Porpoise Harbor, Me.)	836

Laws—Continued.

	Page.
December 21, 1898, concurrent resolution (Cleveland Harbor, Ohio).....	836
January 5, 1899 (Pelican bend, Missouri River).....	836
January 10, 1899 (Racine Harbor, Wis.).....	837
January 10, 1899 (Kenosha Harbor, Wis.).....	837
January 10, 1899 (Cullums Ripple, Ohio River).....	837
January 12, 1899 (Bridgeport Harbor, Conn.).....	838
January 12, 1899 (Ambrose channel, New York Harbor, N. Y.).....	838
January 21, 1899 (Mystic River, Mass.).....	838
February 27, 1899 (Mississippi River at Grand Rapids, Minn.).....	839
March 3, 1899 (sundry civil act).....	840
March 3, 1899 (river and harbor act).....	843
March 3, 1899 (Yellowstone River, Mont.; and East River, N. Y.).....	902
March 3, 1899 (Muscle shoals, Tennessee River, Ala.).....	903
March 3, 1899 (harbor lines, District of Columbia).....	903
February 9, 1900 (Deep Waterways Board).....	904
February 20, 1900 (Galveston Bay and Buffalo Bayou, Tex.).....	905
February 27, 1900 (Mississippi River at Grand Rapids, Minn.).....	906
March 23, 1900 (Cuivre River, Mo.).....	906
April 12, 1900 (Mississippi River between Coon Rapids and Minneapolis, Minn.).....	907
May 4, 1900 (Rainy River, Minn.).....	907
May 9, 1900 (logs, steamboats, and rafts).....	908
June 4, 1900 (New River, Va.).....	909
June 6, 1900 (Muscle shoals, Tennessee River, Ala.).....	910
June 6, 1900 (Wicomico River, Md.).....	910
June 6, 1900 (dredging and mining for precious metals in Alaskan waters).....	910
June 6, 1900 (emergency river and harbor act).....	911
June 6, 1900 (sundry civil act).....	926
January 14, 1901 (Osage River, Mo.).....	932
February 8, 1901 (Savannah River, Ga.).....	933
February 8, 1901 (Twelvemile Bayou, La.).....	934
February 8, 1901 (Mississippi River between Nauvoo and Hamilton, Ill.).....	934
February 12, 1901 (Wabash River at Grand Rapids, Ill.).....	935
February 18, 1901 (Mississippi River Commission).....	935
February 23, 1901 (Mississippi River at La Crosse, Wis.).....	936
February 27, 1901 (Mississippi River reservoirs).....	936
March 1, 1901 (Muscle shoals, Tennessee River, Ala.).....	937
March 1, 1901 (Ashtabula Harbor, Ohio).....	938
March 2, 1901 (Buffalo Harbor, N. Y.).....	938
March 3, 1901 (Ohio River and California Débris Commission.).....	938
March 3, 1901 (rivers and harbors).....	939
March 3, 1901 (Pigeon River, Minn.).....	942
February 7, 1902 (Duluth Harbor, Minn.).....	943
February 14, 1902 (Columbia River and California Débris Commission).....	944
February 26, 1902 (White River, Ark.).....	944
March 10, 1902 (Missouri and Maramec rivers).....	946
April 23, 1902 (Choctaw Point, Mobile Harbor, Ala.).....	947
April 23, 1902 (Everett Harbor, Wash.).....	947
May 3, 1902 (Black Warrior River, Ala.).....	948
June 5, 1902 (Boston Harbor, Mass.).....	949
June 13, 1902 (rivers and harbors).....	949
June 18, 1902 (St. Lawrence River, N. Y.).....	1022
June 24, 1902 (Osage River, Mo.).....	1023
June 28, 1902 (Cumberland River).....	1023
June 28, 1902 (rivers and harbors).....	1024
June 28, 1902 (Rainy River, Minn.).....	1027
June 28, 1902 (Permanent International Commission of the Congresses of Navigation).....	1027
July 1, 1902 (rivers and harbors).....	1028
July 1, 1902 (Philippine Islands).....	1029
July 1, 1902 (Porto Rico).....	1030
July 1, 1902 (Pond River, Ky.).....	1031
July 1, 1902 (New York Harbor, N. Y.).....	1031
January 10, 1903 (Bayou Vermilion, La.).....	1032
January 10, 1903 (Mermentau River, La.).....	1032
February 7, 1903 (St. Croix River, Wis.).....	1033
February 18, 1903 (Muscle shoals, Tennessee River, Ala.).....	1034

Laws—Continued.	Page.
March 3, 1903 (Big Sandy River, W. Va.)	1035
March 3, 1903 (New York Harbor and Chippewa River)	1036
March 3, 1903 (rivers and harbors)	1036
February 26, 1904 (Mississippi River at Sauk Rapids, Minn.)	1042
February 26, 1904 (Mississippi River between Nauvoo and Hamilton, Ill.)	1043
March 4, 1904 (Osage River, Mo.)	1043
March 12, 1904 (Mississippi River between Wright and Sherburne counties, Minn.)	1044
March 25, 1904 (Sabine and Neches rivers and Sabine Lake, Tex.)	1045
April 5, 1904 (Mississippi River between Davenport and Le Claire, Iowa; and at Rock Island rapids)	1045
April 13, 1904 (Bayou Lafourche, La.)	1047
April 20, 1904 (Major Thomas W. Symons)	1047
April 21, 1904 (Calumet River, Ill. and Ind.)	1048
April 21, 1904 (Illinois River, Ill.)	1049
April 23, 1904 (Mississippi River between Stearns and Benton counties, Minn.)	1049
April 26, 1904 (Tennessee River at Scott Point, Tenn.)	1050
April 27, 1904 (Chicago River, Ill.)	1054
April 27, 1904 (Presque Isle Peninsula, Erie Harbor, Pa.)	1055
April 28, 1904 (rivers and harbors)	1056
April 28, 1904 (sundry civil act)	1057
April 28, 1904 (Trinity River, Tex.)	1061
April 28, 1904 (Missouri River, S. Dak.)	1061
January 7, 1905 (Tennessee River near Scott Point, Tenn.)	1062
February 1, 1905 (canals, etc., across forest reserves)	1063
February 1, 1905 (compilation of river and harbor laws)	1063
February 6, 1905 (Philippine Islands)	1063
February 9, 1905 (Mississippi River between Keokuk, Iowa, and Hamilton, Ill.)	1064
February 9, 1905 (Little Klamath, Rhett, and Gooselakes, Oreg. and Cal.)	1066
February 9, 1905 (Gull Lake reservoir, Mississippi River)	1067
February 15, 1905 (Grand River, Mo.)	1067
February 15, 1905 (Harlem River, N. Y.)	1067
February 18, 1905 (Miami and Erie Canal)	1068
February 20, 1905 (Mississippi River at Sauk Rapids, Minn.)	1069
February 24, 1905 (claims)	1071
February 24, 1905 (protection of persons furnishing materials and labor)	1072
February 25, 1905 (Rainy River, Minn.)	1074
February 25, 1905 (Rio Grande near Engle, N. Mex.)	1075
March 2, 1905 (Buffalo Harbor, N. Y.)	1075
March 3, 1905 (Mississippi River reservoirs)	1076
March 3, 1905 (Rock River at Lyndon, Ill.)	1077
March 3, 1905 (Spokane River, Wash.)	1078
March 3, 1905 (Mississippi River near Bemidji, Minn.)	1079
March 3, 1905 (Yellowstone River, Mont.)	1080
March 3, 1905 (river and harbor act)	1080
March 3, 1905 (sundry civil act)	1133
March 3, 1905 (printing)	1138
March 3, 1905 (Louisville and Portland Canal)	1138

(For continuation of this list see "Contents" in Volume II, page XII *et seq.*)

LETTER OF TRANSMITTAL.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, February 10, 1905.

SIR: Joint resolution of Congress, approved February 1, 1905, provides:

That there shall be printed three thousand copies of a compilation of the laws of the United States relating to the improvement of rivers and harbors, passed until and including the laws of the second session of the Fifty-eighth Congress, of which six hundred copies shall be for the use of the Senate, one thousand four hundred copies for the use of the House of Representatives, and one thousand copies for the use of the War Department, the said compilation to be printed under the direction of the Secretary of War.

The compilation thus called for has been prepared in this Office, and is submitted herewith with recommendation that it be printed and bound at the Government Printing Office in pursuance of the above-quoted provision of law. To save expense in case further editions are required, I beg to suggest that the publication be electrotyped.

Very respectfully,

A. MACKENZIE,
Brig. Gen., Chief of Engineers, U. S. Army.
Hon. WM. H. TAFT,
Secretary of War.

[First indorsement.]

WAR DEPARTMENT,
February 11, 1905.

Approved.

JOHN C. SCOFIELD,
Chief Clerk.

EXTRACT FROM THE RIVER AND HARBOR ACT APPROVED JUNE 13, 1902.

Sec. 13. That there shall be printed three thousand copies of the laws of the United States relating to the improvement of rivers and harbors passed until and including the laws of the first session of the Fifty-seventh Congress, of which six hundred copies shall be for the use of the Senate, fourteen hundred for the use of the House, and one thousand copies for the use of the War Department. Said compilation shall be printed under the direction of the Secretary of War.

EXTRACT FROM THE RIVER AND HARBOR ACT APPROVED MARCH 2, 1907.

Sec. 4. That the compilation of laws of the United States relating to the improvement of rivers and harbors authorized by section thirteen of the river and harbor Act of June thirteenth, nineteen hundred and two, and joint resolution of Congress approved February first, nineteen hundred and five, shall be extended to include all such laws enacted up to the close of the second session of the Fifty-ninth Congress; and three thousand copies of this compilation shall be printed under the direction of the Secretary of War, of which six hundred copies shall be for the use of the Senate, one thousand four hundred copies for the use of the House, and one thousand copies for the use of the office of the Chief of Engineers, United States Army.

LAWS OF THE UNITED STATES

RELATING TO THE

IMPROVEMENT OF RIVERS AND HARBORS,

FROM

AUGUST 11, 1790, TO MARCH 4, 1907.

CHAP. 43.—An Act Declaring the assent of Congress to certain Acts of the States of Maryland, Georgia, and Rhode Island and Providence Plantations.

Aug. 11, 1790.
Vol. 1, p. 184.

[Expired.]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress be, and is hereby declared to the operation of the acts of the several states hereinafter mentioned, so far as the same relate to the levying a duty on the tonnage of ships and vessels for the purposes therein mentioned until the tenth day of January next—that is to say: an act of the General Assembly of the state of Rhode Island and Providence Plantations, at their session held in January, one thousand seven hundred and ninety, intituled [*sic*] “An act to incorporate certain persons by the name of the River Machine Company, in the town of Providence, and for other purposes therein mentioned;” and also, an act of the General Assembly of the state of Maryland, at their session in April, one thousand seven hundred and eighty-three, intituled [*sic*] “An act appointing wardens for the port of Baltimore-town in Baltimore county;” as also, another act of the General Assembly of the same state, passed at their session in November, one thousand seven hundred and eighty-eight, intituled [*sic*] “A supplement to the act intituled [*sic*], An act appointing wardens for the port of Baltimore-town in Baltimore county;” and also, an act of the state of Georgia, “for levying and appropriating a duty on tonnage, for the purpose of clearing the river Savannah, and removing the wrecks and other obstructions therein.”

Certain acts of several States that relate to tonnage of vessels declared to be in operation until January 10, 1791.

1791, c. 3.
1792, c. 10.
1796, c. 26.

Approved, August 11, 1790.

Jan. 10, 1791.
Vol. 1, p. 189.

[Expired.]

CHAP. 3.—An Act To continue an Act intituled [*sic*] “An Act declaring the assent of Congress to certain Acts of the States of Maryland, Georgia, and Rhode Island and Providence Plantations,” so far as the same respects the States of Georgia and Rhode Island and Providence Plantations.

Act continued
as to Georgia and
Rhode Island for
another year, etc.

1790, c. 43; 1792,
c. 10.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act passed the last session of Congress, intituled [*sic*] “An act declaring the assent of Congress to certain acts of the states of Maryland, Georgia, and Rhode Island and Providence Plantations,” shall be continued, and is hereby declared to be in full force, so far as the same respects the states of Georgia, and Rhode Island and Providence Plantations, for the farther term of one year, and from thence to the end of the then next session of Congress, and no longer.

Approved, January 10, 1791.

Mar. 19, 1792.
Vol. 1, p. 243.

[Expired.]

CHAP. 10.—An Act Declaring the consent of Congress to a certain Act of the State of Maryland, and to continue for a longer time, an Act declaring the assent of Congress to certain Acts of the States of Maryland, Georgia, and Rhode Island and Providence Plantations, so far as the same respects the States of Georgia, and Rhode Island and Providence Plantations.

Consent of Con-
gress granted to
operation of cer-
tain act of Mary-
land; and

Act May 12,
1796, c. 26.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the consent of Congress be, and is hereby granted and declared to the operation of an act of the general assembly of Maryland, made and passed at a session begun and held at the city of Annapolis, on the first Monday in November last, intituled [*sic*] “An act empowering the wardens of the port of Baltimore to levy and collect the duty therein mentioned.”

Assent to cer-
tain acts, Mary-
land, etc., as to
Georgia and
Rhode Island.

1790, c. 43; 1791,
c. 3.

SEC. 2. *And be it further enacted,* That the act, intituled [*sic*] “An act declaring the assent of Congress to certain acts of the states of Maryland, Georgia, and Rhode Island and Providence Plantations,” shall be continued, and is hereby declared to be in full force, so far as the same respects the states of Georgia, and Rhode Island and Providence Plantations.

Limitation of
act to June 1,
1796.

SEC. 3. *And be it further enacted,* That this act shall be and continue in force for the term of three years, and from thence to the end of the next session of Congress, and no longer.

Approved, March 19, 1792.

May 12, 1796.
Vol. 1, p. 463.

[Expired.]

CHAP. 26.—An Act Declaring the consent of Congress to a certain Act of the State of Maryland, and to continue an Act declaring the assent of Congress to certain Acts of the States of Maryland, Georgia and Rhode Island and Providence Plantations, so far as the same respects the States of Georgia, and Rhode Island and Providence Plantations.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress*

assembled, That the consent of Congress be, and is hereby granted and declared to the operation of an act of the General Assembly of Maryland, made and passed at a session begun and held at the city of Annapolis, on the first Monday of November, in the year one thousand seven hundred and ninety-one, intituled [*sic*] "An act empowering the wardens of the port of Baltimore to levy and collect the duty therein mentioned."

Consent of Congress to certain act of Maryland empowering wardens of port of Baltimore to levy and collect duty therein mentioned.

SEC. 2. *And be it further enacted*, That the act intituled [*sic*] "An act declaring the assent of Congress to certain acts of the States of Maryland, Georgia and Rhode Island and Providence Plantations," shall be continued, and is hereby declared to be in full force, so far as the same respects the states of Georgia and Rhode Island and Providence Plantations.

Part of act declaring assent of Congress to certain acts of States of Maryland, Georgia, and Rhode Island continued in force.
1790, c. 43; 1800 c. 15.

SEC. 3. *And be it further enacted*, That this act shall be, and continue in force for the term of three years, and from thence to the end of the next session of Congress thereafter, and no longer.

Approved, May 12, 1796.

CHAP. 21.—An Act Declaring the consent of Congress to an Act of the Commonwealth of Massachusetts.

Mar. 27, 1798.
Vol. 1, p. 546.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress be and hereby is granted and declared to the operation of an act of the legislature of the commonwealth of Massachusetts made and passed the second day of February, one thousand seven hundred and ninety-eight, intituled [*sic*] "An act to incorporate Tobias Lord, Oliver Keating, Thatcher Godard and others for the purpose of keeping in repair a pier, at the mouth of Kennebunk river, and to grant them a duty for reimbursing the expense of erecting the same."

Consent of Congress to act of Commonwealth of Massachusetts. Kennebunk River, Me.

Approved, March 27, 1798.

CHAP. 15.—An Act Declaring the assent of Congress to certain Acts of the States of Maryland and Georgia.

Mar. 17, 1800.
Vol. 2, p. 18.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the consent of Congress be, and hereby is granted to the operation of an act of the General Assembly of the state of Maryland, passed on the twenty-sixth day of December, one thousand seven hundred and ninety-one, entitled "An act empowering the wardens of the port of Baltimore to levy and collect the duty therein mentioned," and also to so much of an act of the state of Georgia, passed February the tenth, one thousand seven hundred and

Consent of Congress granted to act of State of Maryland mentioned; and to so much of act of State of Georgia, etc.
1808, c. 47; 1814, c. 60; 1822, c. 29.

[Expired.]

Act Jan. 19, 1861,
c. 11.

eighty-seven, entitled "An act for regulating the trade, laying duties on all goods, wares, liquors, merchandise and negroes imported into this state; and also an impost on the tonnage of shipping, and for other purposes therein mentioned," as authorizes a duty of three pence per ton on all shipping entering the port of Savannah, to be set apart as a fund for clearing the river Savannah.

Limitation of
act to Mar. 3,
1808.

SEC. 2. *And be it further enacted*, That this act shall be, and continue in force until the third day of March, one thousand eight hundred and eight, and no longer.

Approved, March 17, 1800.

Apr. 6, 1802.
Vol. 2, p. 150.

CHAP. 20. An Act Authorizing the erection of certain lighthouses; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * *

Sum appropri-
ated for public
piers in Dela-
ware River.
1805, c. 21.

SEC. 8. *And be it further enacted*, That it shall be lawful for the Secretary of the Treasury, under the direction of the President of the United States, to cause to be expended, in repairing and erecting public piers, in the river Delaware, a sum not exceeding thirty thousand dollars; and that the same be paid out of any moneys in the treasury, not otherwise appropriated: *Provided*, that the jurisdiction of the site where any such piers may be erected, shall be first ceded to the United States, according to the conditions in such case by law provided.

On what con-
ditions.

Approved. April 6, 1802.

Mar. 16, 1804.
Vol. 2, p. 269.

CHAP. 22.—An Act Declaring the assent of Congress to an Act of the general assembly of Virginia, therein mentioned.

Assent of Con-
gress to act of
Virginia for im-
proving naviga-
tion of James
River, etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress is hereby given and declared to an act of the general assembly of Virginia, intituled [*sic*] "An act for improving the navigation of James River," which act was passed on the twenty-third day of January, in the year one thousand eight hundred and four.

Approved, March 16, 1804.

Mar. 1, 1805.
Vol. 2, p. 316.

CHAP. 21.—An Act Making appropriations for the support of Government, for the year one thousand eight hundred and five.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That * * * the following sums be, and the same hereby are respectively appropriated; that is to say:

* * * * *

For reviving so much of unexpended balances of appropriations granted by an act passed the sixth of April, one thousand eight hundred and two, and which have been carried to the surplus fund, to wit:

Reviving un-
expended bal-
ances.

For erecting public piers in the river Delaware, five thousand eight hundred and eighty-eight dollars, and seventy-nine cents.

Piers in Dela-
ware River.
1802, c. 20.

* * * * *

Approved, March 1, 1805.

CHAP. 12.—An Act Declaring the consent of Congress to an Act of the State of Pennsylvania, intituled, [*sic*] “An Act to empower the board of wardens, for the port of Philadelphia, to collect a certain duty on tonnage, for the purposes therein mentioned.”

Feb. 28, 1806.
Vol. 2, p. 353.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress be, and it is hereby granted and declared to the operation of an Act of the legislature of Pennsylvania, passed on the first day of April, in the year one thousand eight hundred and five, intituled [*sic*] “An act to empower the board of wardens, for the port of Philadelphia, to collect a certain duty on tonnage, for the purposes therein mentioned,” so far as to enable the state of Pennsylvania to collect a duty of four cents per ton, on all vessels which shall clear out from the port of Philadelphia for any foreign port or place whatever, to be expended in building piers in, and otherwise improving the navigation of the river Delaware, agreeably to the intentions of the said act.

Assent of Con-
gress to act of
legislature of
Pennsylvania,
laying duty on
tonnage.

Approved, February 28, 1806.

CHAP. 33.—An Act Making appropriations for the support of Government for the year one thousand eight hundred and six.

Apr. 18, 1806.
Vol. 2, p. 384.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the expenditure of the civil list, in the present year, including the contingent expenses of the several departments and officers; * * * and for satisfying certain miscellaneous claims; the following sums be, and the same hereby are respectively appropriated, that is to say:

Objects of ap-
propriation.

* * * * *

For the payment of a commission of two and a half percent. to the commissioners who superintended the erection of public piers in the river Delaware, four hundred and forty-eight dollars and seventy-one cents.

Piers in Dela-
ware River.

* * * * *

SEC. 2. *And be it further enacted, That* the several appropriations hereinbefore made, shall be paid and discharged out of the fund of six hundred thousand dollars, reserved

1790, c. 34.

by an act making provision for the debt of the United States, and out of monies [*sic*] in the treasury, not otherwise appropriated.

Approved, April 18, 1806.

Apr. 20, 1808.
Vol. 2, p. 484.

CHAP. 47.—An Act To revive and continue in force “An Act declaring the assent of Congress to certain acts of the States of Maryland and Georgia.”

[Expired.]

Act Mar. 17,
1800, c. 15, re-
vived and con-
tinued in force
until Mar. 3, 1814.
1800, c. 15.
1814, c. 60.
Act Jan. 19,
1861, c. 11.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act which passed the seventeenth day of March, in the year one thousand eight hundred, intituled [*sic*] “An act declaring the assent of Congress, to certain acts of the states of Maryland and Georgia,” be, and the same is hereby revived and continued in force until the third day of March, one thousand eight hundred and fourteen.

Approved, April 20, 1808.

Feb. 10, 1809.
Vol. 2, p. 516.

CHAP. 15.—An Act Making appropriations to complete the fortifications commenced for the security of the seaport towns and harbors of the United States, and to defray the expense of deepening and extending to the River Mississippi, the canal of Carondelet.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

Canal of Carondelet, to be made under direction of President.

SEC. 2. *And be it further enacted,* That the President of the United States be, and he is hereby authorized to cause the canal of Carondelet, leading from Lake Ponchartrain, by way of the Bayou St. John, to the city of New Orleans, to be extended to the river Mississippi, and made sufficiently deep throughout to admit an easy and safe passage to gunboats, if, upon survey thereof, he shall be convinced that the same is practicable, and will conduce to the more effectual defense of said city; and that for the purpose of defraying the expense thereof, there be, and hereby is appropriated the sum of twenty-five thousand dollars, to be paid out of any monies [*sic*] in the treasury not otherwise appropriated.

Appropriation.

Approved, February 10, 1809.

Apr. 16, 1814.
Vol. 3, p. 125.

CHAP. 60.—An Act To revive and continue in force “An Act declaring the assent of Congress to certain acts of the States of Maryland and Georgia.”

Act Mar. 17,
1800, c. 15, con-
tinued in force
until Mar. 3, 1822.
1822, c. 29.
Act Jan. 19,
1861, c. 11.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act which passed the seventeenth day of March, in the year one thousand eight hundred, entitled “An act declaring the assent of Congress to certain acts of the states of Maryland and Georgia,” be, and the same is

hereby revived and continued in force until the third day of March, one thousand eight hundred and twenty-two: *Provided*, That nothing herein contained shall authorize the demand of a duty on tonnage, on vessels propelled by steam, employed in the transportation of passengers.

Approved, April 16, 1814.

CHAP. 77.—An Act Declaring the assent of Congress to An act of the general assembly of the state of Virginia.

Apr. 26, 1816.
Vol. 3, p. 301.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the assent of Congress is hereby given and declared to an act of the General Assembly of Virginia, entitled “An act incorporating a company for the purpose of improving the navigation of James river from Warwick to Rockett’s landing,” which act was passed on the twenty-second day of February, in the year one thousand eight hundred and sixteen.

Assent of Congress given to act of general assembly of Virginia, for improving navigation of James River.

Approved, April 26, 1816.

CHAP. 18.—An Act Making appropriations for the military service of the United States for the year eighteen hundred and nineteen.

Feb. 15, 1819.
Vol. 3, p. 480.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respectively, appropriated:

[Obsolete.]

* * * * *

For making a survey of the water courses tributary to, and west of, the Mississippi; also those tributary to the same river, and northwest of the Ohio; six thousand five hundred dollars.

Survey of water courses.

* * * * *

SEC. 2. *And be it further enacted*, That the several appropriations hereinbefore made, shall be paid out of any moneys in the Treasury not otherwise appropriated.

Moneys to be paid out of Treasury.

Approved, February 15, 1819.

CHAP. 47.—An Act To enable the people of the Alabama Territory to form a constitution and State government, and for the admission of such State into the Union on an equal footing with the original States.

Mar. 2, 1819.
Vol. 3, p. 489.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the inhabitants of the territory of Alabama be, and they are hereby, authorized to form for themselves a constitution and state government, and to assume such name as they may deem proper; and that the said territory,

Inhabitants of Alabama authorized to form constitution and State government.

To be admitted
into Union.

when formed into a state, shall be admitted into the union, upon the same footing with the original states, in all respects whatever.

* * * * *

Propositions
offered to con-
vention; to be
obligatory if ac-
cepted.

SEC. 6. *And be it further enacted*, That the following propositions be, and the same are hereby, offered to the convention of the said territory of Alabama, when formed, for their free acceptance or rejection, which, if accepted by the convention, shall be obligatory upon the United States.

* * * * *

Five percent of
net proceeds of
land sold after
Sept. 1, 1819, to
be reserved for
making public
roads, canals,
etc.

Third. That five per cent. of the net proceeds of the lands lying within the said territory, and which shall be sold by Congress, from and after the first day of September, in the year one thousand eight hundred and nineteen, after deducting all expenses incident to the same, shall be reserved for making public roads, canals, and improving the navigation of rivers, of which three-fifths shall be applied to those objects within the said state, under the direction of the legislature thereof, and two-fifths to the making of a road or roads leading to the said state, under the direction of Congress.

* * * * *

Approved, March 2, 1819.

Apr. 14, 1820.
Vol. 3, p. 502.

CHAP. 45.—An Act Making appropriations for the military service of the United States, for the year one thousand eight hundred and twenty.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respectively, appropriated:

* * * * *

Survey of wa-
ter courses.

For making a survey of the water-courses tributary to, and west of, the Mississippi, also those tributary to the same river and northwest of the Ohio, four thousand five hundred dollars.

Survey, maps,
and charts of
Ohio and Missis-
sippi.

For making a survey, maps, and charts, of the Ohio and Mississippi rivers, from the rapids of the Ohio at Louisville, to the Balize, for the purpose of facilitating and ascertaining the most practicable mode of improving the navigation of those rivers, five thousand dollars.

* * * * *

Out of money
in Treasury.

SEC. 2. *And be it further enacted*, That the several appropriations hereinbefore made, shall be paid out of any money in the treasury not otherwise appropriated.

Approved, April 14, 1820.

CHAP. 52.—An Act In addition to the several Acts for the establishment and regulation of the Treasury, War, and Navy Departments.

May 1, 1820.
Vol. 3, p. 567.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

SEC. 6. *And be it further enacted,* That no contract shall hereafter be made by the Secretary of State, * * * OR of the Department of War, * * * except under a law authorizing the same, or under an appropriation adequate to its fulfilment; * * *

No contracts to be made except under authority of law or an adequate appropriation.

SEC. 7. *And be it further enacted,* That no land shall be purchased on account of the United States, except under a law authorizing such purchase.

No land to be purchased for the U. S. except under authority of law.

* * * * *

Approved, May 1, 1820.

CHAP. 36.—An Act Making appropriations for the support of the Navy of the United States, for the year one thousand eight hundred and twenty-one.

Mar. 3, 1821.
Vol. 3, p. 634.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That, for defraying the expenses of the navy, for the year one thousand eight hundred and twenty-one, the following sums be, and the same are hereby, respectively appropriated:

* * * * *

For the purpose of enabling the Secretary of the Navy to remove obstructions placed in the river Thames, in Connecticut, by the commander of the American ships, during the late war, one hundred and fifty dollars.

Removing obstructions in River Thames.

SEC. 2. *And be it further enacted,* That the several appropriations hereinbefore made, shall be paid out of any money in the treasury not otherwise appropriated.

Out of money in Treasury.

Approved, March 3, 1821.

CHAP. 52.—An Act To authorize the building of lighthouses therein mentioned, and for other purposes.

Mar. 3, 1821.
Vol. 3, p. 643.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

SEC. 4. *And be it further enacted,* That the President of the United States be, and he is hereby, authorized and requested to cause such an examination or survey of the Isles of Shoals [^a], on the coast of New Hampshire and Maine, to be made, by proper and intelligent persons, as may be

President requested to cause survey of Isles of Shoals, examination of sea wall at Smutty Nose Island, etc.

^a This locality is known also as Gosport Harbor, the village of Gosport being located on Star Island, the principal island of the group.

1822, c. 119.
Post, p. 25.

Portsmouth
 Harbor.

President au-
 thorized to cause
 sea wall to be re-
 paired, etc.

Result to be
 communicated to
 Congress.

Proviso.
 No money to be
 expended till ces-
 sion, etc.

\$2,500 appro-
 priated for pur-
 poses, etc.

requisite to ascertain the expediency and practicability of repairing the sea-wall, at Smutty Nose island, and of building a sea-wall between said island and Cedar island. And that the President be further requested in like manner, to ascertain the expediency of erecting a stone pier on Sunken rocks, in the harbour of Portsmouth, in the State of New Hampshire. And the President is hereby authorized to cause the sea-wall aforesaid to be repaired, and the pier aforesaid to be erected, by contract, under the direction of the collector of the district of Portsmouth, if, on the report of such persons, he shall deem it necessary. And the President is further requested to communicate to Congress, at their next session, the result of so much of the examination and survey, as relates to the expediency and practicability of building the sea-wall aforesaid: *Provided*, That no money shall be expended in erecting the pier aforesaid, until the jurisdiction of the site thereof shall be ceded by the State of New Hampshire to the United States.

SEC. 5. *And be it further enacted*, That a sum, not exceeding two thousand five hundred dollars, is hereby appropriated for the purposes aforesaid; to be paid out of any money in the treasury not otherwise appropriated.

Approved, March 3, 1821.

Apr. 20, 1822.
 Vol. 3, p. 665.

CHAP. 29.—An Act To revive and continue in force “An Act declaring the assent of Congress to certain Acts of the states of Maryland and Georgia.”

Act Mar. 17,
 1800, c. 15, declar-
 ing assent of Con-
 gress to certain
 acts of States of
 Maryland and
 Georgia, revived
 and continued.
 1800, c. 15.

Proviso.
 1823, c. 15.
 Act Jan. 19,
 1861, c. 11.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the act passed the seventeenth day of March, in the year one thousand eight hundred, entitled “An act declaring the assent of Congress to certain acts of the states of Maryland and Georgia,” and which, by subsequent acts, has been revived and continued in force until the third day of March, eighteen hundred and twenty-two, be, and the same hereby is, revived and continued in force until the third day of March, one thousand eight hundred and twenty-eight: *Provided*, That nothing herein contained shall authorize the demand of a duty on tonnage on vessels propelled by steam employed in the transportation of passengers.

Approved, April 20, 1822.

May 7, 1822.
 Vol. 3, p. 698.

CHAP. 119.—An Act To authorize the building of lighthouses therein mentioned, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * *

SEC. 5. *And be it further enacted*, That the Secretary of the Treasury be, and he hereby is, authorized to provide, by contract, to be approved by the President of the United States, for building a sea-wall or pier at the Isles of Shoals^[a], between Cedar Island and Smutty-Nose Island, on the coast of New Hampshire and Maine, conformably to the report of the commissioners appointed under the fourth section of the act passed the third day of March, one thousand eight hundred and twenty-one, entitled "An act to authorize the building of lighthouses therein mentioned, and for other purposes," and that a sum, not exceeding eleven thousand five hundred dollars, is hereby appropriated for the purpose aforesaid, to be paid out of any moneys in the treasury not otherwise appropriated.

Secretary of Treasury to provide by contract, etc., for building sea wall, etc., at Isles of Shoals, etc.

1821, c. 52.
Ante, p. 24.

SEC. 6. *And be it further enacted*, That the Secretary of the Treasury be authorized and required to cause to be erected in the Bay of Delaware, at or near a place called the Shears, near Cape Henlopen, by contract or contracts, to be approved by the President of the United States, two piers of sufficient dimensions to be a harbor or shelter for vessels from the ice, if, after a survey made under his direction, the measure shall be deemed expedient; *And provided* That the jurisdiction of the site where such piers may be erected, shall be first ceded to the United States, according to the conditions in such case by law provided; and that, for the purpose of carrying the same into effect, there be appropriated the sum of twenty-two thousand seven hundred dollars, to be paid out of any moneys in the treasury not otherwise appropriated.

Two piers to be erected by contract at a place called the "Shears," near Cape Henlopen (Delaware Break-water), etc.

Jurisdiction of site to be first ceded.

* * * * *

Approved, May 7, 1822.

CHAP. 56.—An Act To authorize the building of lighthouses, light vessels, and beacons, therein mentioned, and for other purposes.

Mar. 3, 1823.
Vol. 3, p. 780.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * *

SEC. 3. *And be it further enacted*, That the President of the United States be, and he is hereby, authorized to cause such an examination and survey to be made of the obstruction between the harbour of Gloucester and the harbour of Squam [Annisquam], in the State of Massachusetts, as may be requisite to ascertain the expediency of removing such obstruction; and the President is hereby authorized to cause such obstruction to be removed, by contract or otherwise, under the direction of the collector of the district of Gloucester, if, from the report of persons he may appoint to examine and survey the same, he shall deem it expedient; and a sum, not exceeding six thousand

President to cause examination and survey to be made of obstructions between harbors of Gloucester and Annisquam, in Massachusetts.

^a See footnote on page 23.

Appropriation. dollars, is hereby appropriated for that purpose, to be paid out of any money in the treasury not otherwise appropriated.

Appropriation for examination and survey of port Presque Isle (Erie). SEC. 4. *And be it further enacted, by the authority aforesaid,* That the sum of one hundred and fifty dollars be, and the same is hereby, appropriated, to be paid out of any money in the treasury, not otherwise appropriated, to enable the President of the United States, to cause the entrance of the harbour of the port of Presque Isle, in Pennsylvania, to be examined and surveyed by one of the Topographical Engineers of the United States, whose duty it shall be to make a probable estimate of the expense of removing the obstructions, and report on the best manner of removing them, and the effect of such removal on the channel in future.

Approved, March 3, 1823.

Apr. 30, 1824.
Vol. 4, p. 22.

CHAP. 46.—An Act To procure the necessary surveys, plans, and estimates, upon the subject of roads and canals.

President to cause necessary surveys, etc., to be made of such roads and canals as he may deem of national importance, etc. *Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,* That the President of the United States is hereby authorized to cause the necessary surveys, plans, and estimates, to be made of the routes of such roads and canals as he may deem of national importance, in a commercial or military point of view, or necessary for the transportation of the public mail; designating, in the case of each canal, what parts may be made capable of sloop navigation: the surveys, plans, and estimates, for each, when completed, to be laid before Congress.

Two or more skillful engineers to be employed. SEC. 2. *And be it further enacted,* That, to carry into effect the objects of this act, the President be, and he is hereby, authorized to employ two or more skillful civil engineers, and such officers of the corps of engineers, or who may be detailed to do duty with that corps, as he may think proper; and the sum of thirty thousand dollars be, and the same is hereby, appropriated, to be paid out of any moneys in the treasury, not otherwise appropriated.

Approved, April 30, 1824.

May 13, 1824.
Vol. 4, p. 23.

CHAP. 65.—An Act Declaring the consent of Congress to certain Acts of the State of Alabama.

Consent of Congress given to acts of general assembly of Alabama, of Dec. 30 and 31, 1823. *Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,* That the consent of Congress be, and hereby is, granted to the operation of an act of the general assembly of the State of Alabama, passed on the thirtieth of December, one thousand eight hundred and twenty-three, entitled "An act to improve the navigation of the Coosa river, and to aid in its connection with the Tennessee waters;" and,

also, to an act, passed on the thirty-first of December, one thousand eight hundred and twenty-three, entitled "An act to improve the navigation of the Tennessee river."

Approved, May 13, 1824.

CHAP. 139.—An Act To improve the navigation of the Ohio and Mississippi rivers.

May 24, 1824.

Vol. 4, p. 32.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the President of the United States be, and he is hereby, authorized to cause the navigation of the Ohio river to be improved over the following sand bars, or either of them, at his discretion, to wit:

President authorized to cause navigation of Ohio River to be improved.
1832, c. 153.

The sand bar which crosses said river, one mile and a quarter below Flint Island;

The sand bar two miles above French Island;

The bar just below Henderson;

The bar below Straight Island;

The bar below Willow Island, in the Mississippi bend;

And the bar opposite to lower Smithland, below Cumberland Island;

And, for the purpose of ascertaining and directing the best method of carrying the provisions of this act into effect, he may employ any of the engineers in the public service which he may deem proper: *Provided, nevertheless,* That two experiments shall first be made upon two of the said bars, and if in his judgment they shall be successful, then, and not otherwise, he is hereby authorized to cause improvements to be made upon the remaining bars.

Proviso.

SEC. 2. *And be it further enacted, That,* for the purpose of improving the navigation of the Mississippi river, from the mouth of the Missouri to New Orleans, and of the Ohio river from Pittsburg to its junction with the Mississippi, the President of the United States is hereby authorized to take prompt and effectual measures for the removal of all trees which may be fixed in the bed of said river; and, for this purpose, he is authorized to procure and provide, in that way which in his discretion may be most eligible, the requisite water craft, machinery, implements, and force, to raise all such trees, commonly called "planters, sawyers, or snags," as may be found in the current of the said rivers at the lowest stage of water, and to saw or cut them off, as near as practicable to the bottom of the stream; and where trees are found upon sand-bars, upon the points of islands, or near the bank of the river, which may, at the lowest stage of the water, endanger the safety of navigating said rivers, they shall in like manner be cut, removed, or sawed off; and all roots or limbs, belonging to those parts of said trees, which are fastened in the earth, shall be carefully cut away.

President to take effectual measures to render navigation of Mississippi and Ohio safe.

SEC. 3. *And be it further enacted, That,* for the purpose of carrying into effect the provisions of this act, the sum of \$75,000 appropriated.

seventy-five thousand dollars be, and is hereby, appropriated. And the President of the United States is hereby authorized to draw, from time to time, on the Treasury, for such parts, or at any one time for the whole, of said sum, as he shall judge the service requires; which said sum shall be paid out of any money in the Treasury not otherwise appropriated.

President to lay before Congress at commencement of each session statement of proceedings.

SEC. 4. *And be it further enacted*, That the President be, and he is hereby, requested to cause to be laid before Congress, as soon as convenience will permit after the commencement of each session, a statement of the proceedings under this act, that Congress may be enabled to adopt such further measures as may, from time to time, be necessary under existing circumstances.

Approved, May 24, 1824.

May 26, 1824.

Vol. 4, p. 38.

CHAP. 153.—An Act Making appropriations for deepening the channel leading into the harbour of Presque Isle, and for repairing Plymouth Beach.

\$20,000 appropriated for deepening channel leading into harbor of Presque Isle (Erie), and \$20,000 to repair Plymouth beach, Mass.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, out of any moneys in the treasury not otherwise appropriated, and placed at the disposition of the President of the United States, for the purpose of accomplishing the objects hereinafter mentioned, to wit:

The sum of twenty thousand dollars, for making or deepening the channel, leading into the harbour of Presque Isle, in the state of Pennsylvania;

And the sum of twenty thousand dollars, to repair Plymouth Beach, in the state of Massachusetts, and thereby prevent the harbour at that place, from being destroyed.

Approved, May 26, 1824.

Feb. 21, 1825.

Vol. 4, p. 82.

CHAP. 11.—An Act Making appropriations for the military service of the United States, for the year one thousand eight hundred and twenty-five.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respectively, appropriated for the military service of the United States, for the year one thousand eight hundred and twenty-five, to wit:

* * * * *

Appropriation for Board of Internal Improvement.

For making surveys, and carrying on the operations of the board of engineers, in relation to internal improvements, and in addition to an unexpended balance on hand, twenty-eight thousand five hundred and sixty-seven dollars.

* * * * *

Approved, February 21, 1825.

CHAP. 15.—An Act Making appropriations for certain fortifications of the United States, for the year one thousand eight hundred and twenty-five.

Mar. 2, 1825.
Vol. 4, p. 92.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to wit: For fortifications, to each specifically, as follows:

* * * * *

For the preservation of the islands in Boston harbour, necessary to the security of that place, fifty-two thousand nine hundred and seventy-two dollars and fifty-six cents, *Provided, however, That the right of soil of said islands shall be first vested in the United States.*

Preservation of islands in Boston Harbor.

Provido.

* * * * *

Approved, March 2, 1825.

CHAP. 20.—An Act Declaring the assent of Congress to an Act of the general assembly of Virginia, therein mentioned.

Mar. 3, 1825.
Vol. 4, p. 94.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress is hereby given and declared to an act of the general assembly of Virginia, entitled "An act incorporating a company for the purpose of improving the navigation of the Appomattox river, from Pocahontas bridge to Broadway," passed on the eighth day of December, one thousand eight hundred and twenty-four.

Assent of Congress given to act of general assembly of Virginia of Dec. 8, 1824.

Navigation of the Appomattox.

Approved, March 3, 1825.

CHAP. 76.—An Act Authorizing the subscription of stock in the Chesapeake and Delaware Canal Company.

Mar. 3, 1825.
Vol. 4, p. 124.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to subscribe, in the name and for the use of the United States, for one thousand five hundred shares of the capital stock of the Chesapeake and Delaware Canal Company, and to pay for the same, at such times, and in such proportions, as may be required by the said company, out of the dividends which may grow due to the United States upon their bank stock in the Bank of the United States.

Secretary of Treasury authorized to subscribe for 1,500 shares of capital stock of Chesapeake and Delaware Canal Co.

SEC. 2. *And be it further enacted, That the said Secretary of the Treasury shall vote for president and directors of the said company, according to such number of shares, and shall receive upon the said stock, the proportion of the tolls which shall from time to time, be due to the United States for the shares aforesaid.*

Secretary of Treasury to vote for president and directors of company.

Approved, March 3, 1825.

Mar. 3, 1825.
Vol. 4, p. 133.

CHAP. 113.—An Act To authorize the building of lighthouses and light vessels, and beacons, and monuments, therein mentioned; and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

Appropriations. **SEC. 2.** *And be it further enacted,* That there be appropriated, out of any money in the treasury not otherwise appropriated, the following sums of money, to wit:

* * * * *

Plymouth beach. For completing the work to secure Plymouth Beach, in the state of Massachusetts, five thousand seven hundred and twelve dollars.

Pier at mouth of Cuyahoga River (Cleveland Harbor), Ohio. For erecting a pier at the mouth of Cayahoga River, in the state of Ohio, five thousand dollars;

Grand River (Fairport Harbor), Ohio. And for completing the pier at the mouth of Grand River, in the same state, one thousand dollars.

And for surveys to be made under the direction of the President of the United States, for the following purposes, to wit:

Survey for piers at Marblehead and Holmes Hole, Mass. To ascertain the practicability and necessity of constructing a pier, at the mouth of the harbour of Marblehead, for the security of shipping;

And also a pier in the harbour of Holmes' Hole, for the same object, in the state [of] Massachusetts, the sum of four hundred dollars.

Approved, March 3, 1825.

Mar. 3, 1826.
Vol. 4, p. 139.

CHAP. 9.—An Act For the survey of a route for a canal between the Atlantic and the Gulf of Mexico.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the President of the United States be, and he is hereby, authorized to cause to be made an accurate and minute examination of the country south of the St. Mary's river, and including the same, with a view to ascertain the most eligible route for a canal, admitting the transit of boats, to connect the Atlantic with the Gulf of Mexico, and also, with a view to ascertain the practicability of a ship channel;

That he cause particularly to be examined the route from the St. Mary's river to the Appalachicola river or bay, and from the St. John's river to the Vassasousa bay, with a view to both the above objects;

That he cause the necessary surveys, both by land and along the coast, with estimates of the expense of each, accompanied with proper plans, notes, observations, explanations and opinions, of the board of engineers, and that he cause a full report of these proceedings to be made to Congress; and to carry the same into effect, the sum of twenty

thousand dollars be, and the same is hereby, appropriated, out of any money in the treasury not otherwise appropriated. Appropriation.

Approved, March 3, 1826.

CHAP. 15.—An Act To authorize the legislature of the State of Mississippi to appropriate the amount of the three per cent. fund, arising from the sales of public lands. Mar. 14, 1826.
Vol. 4, p. 149.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That three fifths of the five per cent. fund, arising from the net proceeds of the sales of public lands, within the state of Mississippi, may be appropriated by the legislature thereof, to the making of public roads and canals, and to the improvement of the navigation of rivers and bays, within said state. Three-fifths of 5 per cent fund arising from sale of public lands may be applied to making roads, improving rivers, etc.

Approved, March 14, 1826.

CHAP. 17.—An Act Making appropriations for the military service of the United States, for the year one thousand eight hundred and twenty-six. Mar. 25, 1826.
Vol. 4, p. 150.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respectively appropriated, for the military service of the United States, for the year one thousand eight hundred and twenty-six, to wit: Specific appropriations for 1826.

* * * * *

For completing the repair of Plymouth beach, thirteen thousand one hundred and eighty-four dollars and ninety cents. Repair of Plymouth beach, Mass.

* * * * *

For completing the works for deepening the channel of entrance into the harbour of Presque Isle, seven thousand dollars. Harbor of Presque Isle (Erie), Pa.

For the defraying the expenses incidental to making examinations, surveys, preparatory to, and in aid of, the formation of roads and canals, fifty thousand dollars. Surveys, etc., for roads and canals.

* * * * *

Approved, March 25, 1826.

CHAP. 40.—An Act To authorize a subscription for stock, on the part of the United States, in the Louisville and Portland Canal Company. May 13, 1826.
Vol. 4, p. 162.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he hereby is, authorized and directed to subscribe for, or purchase, in the name, and for the use of the United States, not exceed- Secretary of Treasury to subscribe for 1,000 shares of capital stock of Louisville and Portland Canal Co.

ing one thousand shares of the capital stock of the Louisville and Portland Canal Company, and to pay for the same, at such times, and in such proportions, as may be required of, and paid by other stockholders of said company, out of any money in the treasury not otherwise appropriated: *Provided*, Said shares can be procured for a sum not exceeding one hundred dollars each.

Proviso.

Secretary of
Treasury to vote
for president,
etc., of company.

SEC. 2. *And be it further enacted*, That the Secretary of the Treasury shall vote for president and directors of said company, according to such number of shares, and shall receive, upon the said stock, the proportion of the tolls which shall, from time to time, be due to the United States, for the shares aforesaid.

Approved, May 13, 1826.

May 18, 1826.
Vol. 4, p. 169.

CHAP. 65.—An Act For the subscription of stock in the Dismal Swamp Canal Company.

Secretary of
Treasury to sub-
scribe for 600
shares of capital
stock of Dismal
Swamp Canal.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to subscribe, in the name and for the use of the United States, for six hundred shares of the capital stock of the Dismal Swamp Canal, and to pay for the same, at such times, and in such proportions, as may be required by the existing rules and regulations of the said company.

Secretary of
Treasury shall
vote for presi-
dent, etc.

SEC. 2. *And be it further enacted, by the authority aforesaid*, That the Secretary of the Treasury shall vote for the president and directors of said company, according to said number of shares, and shall receive, upon said stock, the proportions of tolls and emoluments which shall, from time to time, become due to the United States, on the shares of stock aforesaid.

Act not to go
into effect until
the Board of En-
gineers shall ex-
amine canal, and
make report to
Secretary of War.

SEC. 3. *And be it further enacted*, That this act shall not go into effect until the United States' board of engineers shall examine said canal, and make a report, in writing, to the Secretary of War, that, in their opinion, the plan on which the canal is to be executed, will answer, as far as circumstances will permit, as a part of the chain of canals contemplated along the Atlantic Coast, and that in their opinion, the sum hereby authorized to be subscribed for will be sufficient to finish the canal according to said plan: *And it is further provided*, That to carry this act into effect, the sum of one hundred and fifty thousand dollars is hereby appropriated, to be paid out of any money in the treasury not otherwise appropriated.

\$150,000 appro-
priated to carry
act into effect.

Money sub-
scribed on behalf
of United States
to be actually
expended whol-
ly in completion
of canal.

SEC. 4. *And be it further enacted*, That the money subscribed on behalf of the United States shall be actually expended in the completion of the canal, and not in the payment of any debt or debts now owing by the company; and it shall be the duty of the Secretary of the

Treasury, before the payment of any part of the money subscribed on behalf of the United States, to adopt such measures as shall insure the application of the same to the completion of the said canal, according to the plan proposed, and to no other purpose whatsoever.

Approved, May 18, 1826.

CHAP. 73.—An Act For authorizing the building of lighthouses and light vessels, erecting beacon lights, placing buoys, removing obstructions in the river Savannah, and for other purposes. May 18, 1826.
Vol. 4, p. 170.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

SEC. 2. *And be it further enacted,* That the following sums of money be, and the same are hereby, appropriated. to wit:

* * * * *

In the state of Georgia, fifty thousand dollars, to be applied under the direction of the President of the United States, to remove obstructions in the river Savannah, below the city of Savannah; * * * Savannah River.

* * * * *

SEC. 6. *And be it further enacted,* That the several appropriations herein made, shall be paid out of any money in the Treasury not otherwise appropriated.

Approved, May 18, 1826.

CHAP. 78.—An Act For improving certain harbours, and the navigation of certain rivers and creeks, and for authorizing surveys to be made of certain bays, sounds, and rivers, therein mentioned. May 20, 1826.
Vol. 4, p. 175.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, to be applied under the direction of the President of the United States, to accomplish the purposes hereinafter mentioned, to wit:

In the state of Maine, one thousand two hundred dollars, for building a pier, on Steels' Ledge, near the harbour of Belfast. Steels Ledge,
Me.

In the state of Massachusetts, three thousand five hundred dollars, for the preservation of the point of land forming Provincetown harbour. Provincetown
Harbor, Mass.

In the state of New York, fifteen thousand dollars, for building a pier, and repairing the old one, at the mouth of Buffaloe Creek; Buffalo Creek,
N. Y.

And three thousand dollars for cleaning out and deepening the harbour of Sackett's Harbour. Sacketts Har-
bor, N. Y.

Piers at New-castle, Del.

In the state of Delaware, twenty-two thousand dollars for building piers, at proper sites, in the river Delaware, at New Castle, and three thousand dollars for repairing the old piers at the same place, and deepening the water around them.

Grand River (Fairport Harbor), Ohio.

In the state of Ohio, five thousand six hundred and twenty dollars, to remove obstructions at the mouth of Grand River;

Ashtabula Creek, Ohio.

Twelve thousand dollars for the same purpose, at the mouth of Ashtabula Creek;

Cunningham Creek, Ohio.

Two thousand dollars for the same purpose, at the mouth of Cunningham Creek;

Huron River, Ohio.

And five thousand dollars for the same purpose, in Huron River;

Survey of Sandusky Bay, Ohio.

And four hundred dollars for making a survey of Sandusky Bay, to ascertain the expediency and expense of constructing piers, to improve the navigation thereof, and of placing buoys therein.

Survey of Piscataqua River, Me.

In the state of Maine, two hundred dollars for making a survey to ascertain the practicability and utility of removing obstructions to navigation in Piscataqua river, and the expense of effecting the same.

In the state of Massachusetts, five hundred dollars for making surveys of the following places, to wit:

Edgartown, Mass.

The flat on the northwest side of the harbour of Edgartown, to ascertain the practicability of building a light-house thereon, and the utility of the same to navigation, and of preventing the said harbour from being filled up with sand.

Mouth of Merrimack River, Hyannis, Mass.

The bar at the mouth of Merrimack river, and the practicability of deepening the channel over the same, and the harbour of Hyannis, in the Vineyard Sound, to ascertain what improvements can be made in the same for the safe anchorage of vessels, and the expense of effecting, severally, these objects.

Survey of Saugatuck River and Harbor, Conn.

In the state of Connecticut, four hundred dollars for making a survey of Saugatuck river and harbour, and to ascertain the expediency and expense of removing the obstructions to the navigation thereof, and of facilitating the commercial intercourse between the port of Saugatuck and the city of New York.

Survey of Oswego Bay and Harbor, N. Y. 1827, c. 46. *Post*, p. 37.

In the state of New York, two hundred dollars for making a survey of Oswego bay and harbour, for ascertaining the expediency and expense of constructing piers, to improve the navigation thereof.

Survey of piers at Chester, Pa.

In the state of Pennsylvania, one hundred dollars, to defray the expense of a survey of the public piers at Chester, in the river Delaware, in order to determine the expediency of accepting the cession thereof made by the state of Pennsylvania, and the expense of repairing the same.

Surveys of the Swash in Pamlico Sound, N. C.

In the state of North Carolina, one thousand dollars for making a survey of the Swash, in Pamlico [Pamlico] Sound, near Ocracock Inlet, for the purpose of ascertaining whether the channel through the same can be deepened;

And also one of Cape Fear River, below the town of Wilmington, [Wilmington,] for the same purpose,

Cape Fear River, below Wilmington, N. C.

Roanoke Inlet and Sound, N. C.

And also for a survey of Roanoke Inlet and sound, with the view of ascertaining the practicability of making a permanent ship channel between Albemarle Sound and the Atlantic Ocean, at Roanoke Inlet, or elsewhere, and a statement of the costs of effecting, severally, these objects.

In the state of Alabama, a sum not exceeding ten thousand dollars, for the purpose of removing the obstructions and deepening the harbour of Mobile.

Mobile Harbor, Ala.

In the territory of Michigan, two hundred dollars for making a survey of La Plaisance bay, to ascertain the expediency of improving the navigation thereof, and the expense of effecting the same.

La Plaisance Bay, Mich. 1827, c. 46.

SEC. 2. *And be it further enacted*, That the several sums herein appropriated be, and the same are hereby, directed to be paid out of any money in the Treasury not otherwise appropriated.

To be paid from Treasury.

Approved, May 20, 1826.

CHAP. 29.—An Act Making appropriations for the military service of the United States, for the year one thousand eight hundred and twenty-seven.

Mar. 2, 1827.

Vol. 4, p. 214.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respectively appropriated for the military service of the United States, for the year one thousand eight hundred and twenty-seven, to wit:

Sums respectively appropriated for military service, 1827.

* * * * *

For completing the works and deepening the channel of entrance into the harbour of Presque Isle, to cover the expense of work done and to be done, which has not been contemplated by any appropriation heretofore made, two thousand dollars.

Completing works, etc., Presque Isle (Erie) Harbor, Pa.

* * * * *

For defraying the expenses incidental to making examinations and surveys, authorized by act of thirtieth of April, one thousand eight hundred and twenty-four, thirty thousand dollars.

Examinations and surveys. 1824, c. 46.

SEC. 2. *And be it further enacted*, That the following sums, being balances of appropriations heretofore made, and transferred to the surplus fund, be, and the same are hereby, reappropriated to the several objects hereinafter mentioned, to wit:

Reappropriations.

* * * * *

For improving the navigation of the Ohio and Mississippi rivers, forty-four thousand nine hundred and eleven dollars and fifty-nine cents.

Navigation of Ohio and Mississippi rivers.

* * * * *

SEC. 3. *And be it further enacted*, That the several sums hereby appropriated shall be paid out of any money in the treasury not otherwise appropriated:

* * * *

Approved, March 2, 1827.

Mar. 2, 1827.
Vol. 4, p. 227.

CHAP. 43.—An Act Authorizing the completion and repair of certain roads in the Territory of Florida, and for other purposes.

President to cause to be opened public road from Georgia line by St. Augustine.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the President of the United States be, and he is hereby, authorized to cause to be opened and repaired, in the territory of Florida, a public road, known by the name of the King's road, from the Georgia line, by Saint Augustine, to New Smyrna.

Troops of United States in Florida to assist in opening and repairing same.

SEC. 2. *And be it further enacted*, That the President be, and he is hereby, authorized to employ the troops of the United States, stationed in Florida, in such manner as he may think proper, in opening and repairing said road; and for defraying the expenses thereof, the sum of eleven thousand dollars is hereby appropriated.

\$5,000 additional appropriated for completion of military road from Pensacola to St. Augustine by construction of bridge across San Sebastian River.

SEC. 3. *And be it further enacted*, That the additional sum of five thousand dollars be, and the same is hereby, appropriated for the completion of the United States' military road from Pensacola to St. Augustine, by the construction of a bridge across the St. Sebastian's river, near St. Augustine;

And that the further sum of six thousand dollars be, and the same is hereby, appropriated, for the purpose of completing the road from Colerain, in Georgia, to Tampa Bay, in the territory of Florida;

And the appropriations aforesaid shall be paid out of any money in the treasury not otherwise appropriated.

Communication between Mosquito Lagoon or Halifax and Indian rivers.
1824, c. 22.

SEC. 4. *And be it further enacted*, That if any part of the above appropriations shall remain unexpended, it shall be appropriated to opening the communication between Moscheto [Mosquito Lagoon] or Halifax and Indian rivers, in the line of communication to Cape Florida, described in the report of the engineer, appointed in pursuance of an act of Congress, of the twenty-eighth day of February, one thousand eight hundred and twenty-four, authorizing the survey of a military road from St. Augustine to Cape Florida.

Approved, March 2, 1827.

Mar. 2, 1827.
Vol. 4, p. 228.

CHAP. 46.—An Act To authorize the improving of certain harbours, the building of piers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, respec-

tively appropriated, to be applied under the direction of the President of the United States, to accomplish the objects hereinafter mentioned; that is to say:

For improving Hyannis harbour, in the State of Massachusetts, a sum not exceeding ten thousand six hundred and fifty dollars. Improving Hyannis Harbor.

For building two piers at the mouth of Oswego harbour in the State of New York, thirty-three thousand three hundred and forty-eight dollars and sixty-four cents; no part of which last-mentioned sum shall be expended until a contract shall have been made for completing said piers, agreeably to the plan proposed in a report made under the act of the twentieth of May last; Building two piers at mouth of Oswego Harbor. 1826, c. 78.

And for erecting a pier by contract, at the mouth of Dunkirk harbour, in the State of New York, three thousand dollars. Pier at mouth of Dunkirk Harbor.

For improving Cleaveland harbour, in the State of Ohio, ten thousand dollars. Improving Cleveland Harbor.

For improving the harbour at the mouth of Pascagoula river, in the state of Mississippi, and for removing the obstructions to the navigation of said river, eight thousand dollars. Harbor at mouth Pascagoula River.

For removing obstructions to the navigation of Saugatuck river, and protecting Saugatuck Harbour, by a suitable work, to prevent the washing of the sand from Cedar Point, into said harbour, a sum not exceeding fifteen hundred dollars. Navigation of Saugatuck Harbor and River, etc.

For completing a pier at the entrance of La Plaisance bay, in the territory of Michigan, agreeably to the plan and estimate made under the act of the twentieth of May last, three thousand nine hundred and seventy-seven dollars and eighty-one cents. Completing pier at entrance of La Plaisance Bay. 1826, c. 78.

For making a survey and examination to ascertain the expediency and expense of constructing piers to improve the harbour of Churches Cove^a, in the town of Little Compton, in the state of Rhode Island, two hundred dollars. Improvement of harbor of Churches Cove.

For making a survey and examination to ascertain the expediency and expense of erecting a pier in Stonington harbour, in the state of Connecticut, two hundred dollars. Erecting pier in Stonington Harbor.

For defraying the expense of an examination of the public piers at Port Penn, Marcus Hook, and Fort Mifflin, in the river Delaware, in the states of Pennsylvania and Delaware, in order to determine the expediency and expense of repairing and improving the same, one hundred dollars. Expense of examination of public piers at Port Penn, Marcus Hook, and Fort Mifflin.

For a survey of the Colbert Shoals, in the Tennessee river, to ascertain the nature of the obstructions, the practicability, the manner, and the expense of removing them, two hundred dollars. Survey of Colbert shoals.

For removing the obstructions to the navigation of the Kennebec river, in the state of Maine, at Lovejoy's Narrows, four thousand dollars; no part of which sum shall be expended until a contract shall have been made for removing Removing obstructions to navigation of Kennebec River.

^aThis cove has sometimes been called "Fishing Place Cove;" it is known also as "Sakonnet Point Harbor."

said obstructions, agreeably to the plan proposed by the engineer employed to make a survey of said narrows.

Erection of
piers, etc., at and
near Saco.

For the erection of piers, placing beacons or buoys, and removing obstructions at, and near, the entrance into the harbour of Saco in the state of Maine, a sum not exceeding seven thousand dollars.

To be paid from
Treasury.

SEC. 2. *And be it further enacted*, That the several sums hereby appropriated, shall be paid out of any money in the treasury not otherwise appropriated.

Approved, March 2, 1827.

Mar. 2, 1827.
Vol. 4, p. 229.

CHAP. 47.—An Act To authorize the building of light houses and beacons, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

Secretary of
Treasury to ac-
cept from State
of Pennsylvania
cession, etc.

SEC. 2. *And be it further enacted*, That the Secretary of the Treasury be, and he is hereby authorized to accept, from the state of Pennsylvania, the cession, to the United States, of the public piers, and the causeway leading thereto, which were built by said State, at Chester, in the Delaware river, and directed to cause said piers and causeway to be repaired by contract.

* * * * *

SEC. 4. *And be it further enacted*, That the following sums be, and the same are hereby, appropriated to accomplish the objects specified in this act, that is to say:

* * * * *

Public piers,
etc., Chester.

For repairing the public piers and causeway at Chester, five thousand three hundred and eighty-three dollars and forty cents.

* * * * *

SEC. 5. *And be it further enacted*, That the sums hereby appropriated shall be paid out of any money in the treasury not otherwise appropriated.

Approved, March 2, 1827.

Mar. 2, 1827.
Vol. 4, p. 234.

CHAP. 51.—An Act To grant a quantity of land to the State of Illinois, for the purpose of aiding in opening a canal to connect the waters of Illinois River with those of Lake Michigan.

Certain quan-
tity of land to be
allowed for open-
ing canal to unite
waters of Illinois
River with those
of Lake Michi-
gan (Illinois and
Michigan Can-
al).

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Illinois, for the purpose of aiding the said State in opening a canal to unite the waters of the Illinois River with those of Lake Michigan, a quantity of land equal to one-half of five sections in width, on each side of said canal, and reserving each alternate section to the United States, to be selected by the commissioner of the land office, under the

direction of the President of the United States, from one end of the said canal to the other; and the said lands shall be subject to the disposal of the legislature of the said State, for the purpose aforesaid, and no other: *Provided*, That the said canal, when completed, shall be and forever remain, a public highway for the use of the Government of the United States, free from any toll, or other charge, whatever, for any property of the United States, or persons in their service, passing through the same: *Provided*, That said canal shall be commenced within five years, and completed in twenty years, or the State shall be bound to pay to the United States the amount of any lands previously sold, and that the title to purchasers under the State shall be valid.

Proviso.

Proviso.

SEC. 2. *And be it further enacted*, That, so soon as the route of the said canal shall be located and agreed on by the said State, it shall be the duty of the governor thereof, or such other person or persons as may have been, or shall hereafter be, authorized to superintend the construction of said canal, to examine and ascertain the particular sections to which the said State will be entitled, under the provisions of this act, and report the same to the Secretary of the Treasury of the United States.

Duty of governor of State when canal is located, etc.

SEC. 3. *And be it further enacted*, That the said State, under the authority of the legislature thereof, after the selection shall have been so made, shall have power to sell and convey the whole, or any part of the said land, and to give a title in fee simple therefor, to whomsoever shall purchase the whole, or any part thereof.

Power given to legislature.

Approved, March 2, 1827.

CHAP. 56.—An Act To grant a certain quantity of land to the State of Indiana, for the purpose of aiding said State in opening a canal to connect the waters of the Wabash river with those of Lake Erie.

Mar. 2, 1827.
Vol. 4, p. 236.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there be, and hereby is, granted to the state of Indiana, for the purpose of aiding the said state in opening a canal to unite at navigable points the waters of the Wabash river with those of Lake Erie, a quantity of land equal to one half of five sections in width, on each side of said canal, and reserving each alternate section to the United States, to be selected by the commissioner of the land office, under the direction of the President of the United States, from one end thereof to the other; and the said land shall be subject to the disposal of the legislature of said state, for the purpose aforesaid, and no other; *Provided*, That the said canal, when completed, shall be, and forever remain, a public highway for the use of the government of the United States, free from any toll, or other charge,

Certain quantity of land granted to State for opening canal to unite at navigable points waters of Wabash River with Lake Erie (Wabash and Erie Canal).
1834, c. 137; 1841, c. 12; 1845, c. 42.

Proviso.

Proviso.

whatever, for any property of the United States, or persons in their service passing through the same: *Provided*, That said canal shall be commenced within five years, and completed in twenty years, or the state shall be bound to pay to the United States the amount of any lands previously sold, and that the title to purchasers under the state shall be valid.

Duty of governor of State, when canal is located, etc.

SEC. 2. *And be it further enacted*, That, so soon as the route of the said canal shall be located and agreed on by the said state, it shall be the duty of the governor thereof, or such other person or persons as may have been, or shall hereafter be, authorized to superintend the construction of said canal, to examine and ascertain the particular lands to which the said state will be entitled under the provisions of this act, and report the same to the Secretary of the Treasury of the United States.

Power given to legislature to sell.

SEC. 3. *And be it further enacted*, That the said state, under the authority of the legislature thereof, after the selection shall have been so made, shall have power to sell and convey the whole, or any part of the said land, and to give a title, in fee simple, therefor, to whomsoever shall purchase the whole or any part thereof.

Approved, March 2, 1827.

Mar. 3, 1827.
Vol. 4, p. 241.

CHAP. 92.—An Act For improving the navigation of the Ohio River.

Snags, etc., to be removed.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That all snags, sawyers, stumps, logs, and obstructions of every description, which tend to endanger the steamboat navigation of the Ohio river, at any navigable stages of the water, and which present themselves, and are to be found on the banks and sides of the river, shall be removed so that the navigation of said river, may be rendered at all times safe: and the same shall be done under the supervision and direction of the Secretary of War, and through the aid of some practical agent acquainted with the situation of the river, its respective bars, islands, and dangerous [dangerous] places and parts; and he shall likewise cause the channel of said river, at a part usually called the Grand Chain, near its mouth, so to be deepened by a proper channel formed, that at the usual state of the water, steamboats may be enabled safely to pass and re-pass the same.

\$30,000 appropriated.

SEC. 2. *And be it further enacted*, That, for carrying this act into effect, the sum of thirty thousand dollars be, and the same is hereby, appropriated, out of any money in the treasury not otherwise appropriated.

Approved, March 3, 1827.

CHAP. 15.—An Act To revive and continue in force “An Act declaring the assent of Congress to a certain Act of Maryland.”

Mar. 10, 1828.

Vol. 4, p. 254.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the act passed the seventeenth day of March, in the year one thousand eight hundred, entitled “An Act declaring the assent of Congress to certain acts of the states of Maryland and Georgia,” and which, by subsequent acts, has been revived and continued in force, until the third day of March, one thousand eight hundred and twenty-eight, be, and the same so far as relates to the act of Maryland, hereby is revived and continued in force, until the third day of March, one thousand eight hundred and thirty-eight: Provided, That nothing herein contained, shall authorize the demand of a duty on tonnage on vessels propelled by steam, employed in the transportation of passengers.

Act Mar. 17, 1880, c. 15, relative to levying tonnage duties at port of Baltimore, continued in force until Mar. 3, 1838.

Proviso. 1838, c. 34. Act Jan. 19, 1861, c. 11.

Approved, March 10, 1828.

CHAP. 18.—An Act Making appropriations for certain fortifications of the United States, for the year one thousand eight hundred and twenty-eight.

Mar. 19, 1828.

Vol. 4, p. 256.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated; to wit: for fortifications, to each specifically, as follows:

* * * * *

For preservation of Islands in Boston harbour, two thousand dollars.

Preservation of islands in Boston Harbor. Paid from Treasury.

SEC. 2. *And be it further enacted, That the several sums, hereby appropriated, shall be paid out of any money in the treasury not otherwise appropriated.*

Approved, March 19, 1828.

CHAP. 56.—An Act Making appropriations for the improvement of certain harbours, the completion of the Cumberland road to Zanesville, the securing the lighthouse on the Brandywine shoal, and the making of surveys.

May 19, 1828.

Vol. 4, p. 275.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to wit:

* * * * *

To complete the removal of obstructions at the mouth of Grand river, in the state of Ohio, nine thousand one hundred and thirty-five dollars and eleven cents.

Removal of obstructions, Grand River (Fairport Harbor).

To complete the removal of obstructions at the mouth of Huron river, in the state of Ohio, four thousand four hundred and thirteen dollars and thirty-five cents.

Removal of obstructions, Huron River.

Piers at Dun-
kirk Harbor.

To complete the erection of piers, at the mouth of Dun-
kirk harbour, in the state of New York, six thousand dollars.

* * * * *

Two piers at
mouth of Oswego
Harbor.

Act Mar. 2,
1827, c. 46.

To complete the building of two piers at the mouth of
Oswego harbour, in the State of New York, authorized by
an act of Congress, approved the twentieth [second] of
March last, entitled "An act to authorize the improving of
certain harbours, the building of piers, and for other pur-
poses," nine thousand five hundred and eighty-three dollars
and thirty-nine cents.

Deepening
channel of en-
trance into har-
bor of Presque
Isle (Erie).

For deepening the channel of entrance, into the harbour
of Presque Isle, six thousand two hundred and twenty-
three dollars and eighteen cents.

Removal of ob-
structions in Ash-
tabula Creek,
Ohio.

For completing the removal of obstructions at the mouth
of Ashtabula Creek, Ohio, two thousand four hundred and
three dollars and fifty cents.

Removal of ob-
structions of
Cunningham
Creek, Ohio.

For completing the removal of obstructions at the mouth
of Cunningham Creek, Ohio, one thousand five hundred
and seventeen dollars and seventy-six cents.

Removing ob-
structions in
Kennebec River.

For removing obstructions to the navigation of Kenne-
bec river, at Lovejoy's Narrows, by removing the half tide
and other rocks, in addition to the appropriation of last
session, three thousand five hundred dollars.

* * * * *

Defraying ex-
penses inci-
dental to making
examinations,
etc., under act
Apr. 30, 1824, c. 46.
Proviso.

For defraying the expenses incidental to making exami-
nations and surveys, under the act of thirtieth April, one
thousand eight hundred and twenty-four, thirty thousand
dollars: *Provided*, That this appropriation shall not be con-
strued into a Legislative sanction of any examination or
survey which shall not be deemed of national importance,
and within the provisions of the aforesaid act of the thir-
tieth April, one thousand eight hundred and twenty-four.

To complete
pier at Buffalo,
N. Y.

To complete a pier adjacent to a pier at Buffalo, in the
State of New York, thirty-four thousand two hundred and
six dollars.

Paid out of any
money in Treas-
ury.

SEC. 2. *And be it further enacted*, That the several sums,
hereby appropriated, shall be paid out of any money in the
Treasury not otherwise appropriated.

Approved, May 19, 1828.

May 23, 1828.
Vol. 4, p. 288.

CHAP. 73.—An Act To authorize the improving of certain har-
bours, the building of piers, and for other purposes.

*Be it enacted by the Senate and House of Representatives
of the United States of America, in Congress assembled*, That
the following sums be, and the same are hereby, respec-
tively appropriated, to be applied under the direction of
the President of the United States, to accomplish the
objects hereinafter mentioned; that is to say:

For removing the sand bar at or near the mouth of Merimack river in the state of Massachusetts, by erecting piers, or other works, thirty-two thousand one hundred dollars.

Removingsand bar at or near mouth of Merimack River, Mass.

For the preservation of Deer island, in Boston Harbour, in the state of Massachusetts, eighty-seven thousand dollars.

Preservation of Deer Island.

Towards erecting piers, or other works, at or near Stonington harbour, in the state of Connecticut, for the purpose of making the same a good and secure harbour, twenty thousand dollars.

Piers near Stonington Harbor, Conn.

For repairing the public piers at Port Penn, Marcus Hook, and fort Mifflin, four thousand four hundred and thirteen dollars.

Repairing piers at Port Penn, etc.

For purchasing a dredging machine, to be worked by steam, and employing the same for the removal of the shoals forming obstructions to the navigation near Ocracoke Inlet, in the state of North Carolina, twenty thousand dollars.

For purchasing dredging machine, etc.

Towards removing the sand bar at or near the mouth of Black river, in the state of Ohio, by the erection of piers, or other works, seven thousand five hundred dollars.

Black River (Lorain Harbor). Obstructions in Apalachicola River.

For removing obstructions in the Apalachicola river, in the territory of Florida, three thousand dollars.

For improving the navigation of Red river, through, or around, that part of it called the Raft, situated in Louisiana and Arkansas, twenty-five thousand dollars, three thousand dollars in addition to a former appropriation for clearing out and deepening the harbor of Sackett's Harbour.

Improving navigation of Red River.

Sacketts Harbor.

For making a survey of the harbour of Nantucket, and the passage leading to it, and an estimate of the cost of improving and making the harbour a good and secure one, three hundred dollars.

Survey of harbor of Nantucket, etc.

For making a survey of Genessee river and harbour, in the state of New York, and estimates of the cost for improving the same, three hundred dollars.

Survey, Genessee River (Charlotte Harbor).

For surveying the mouth of Sandy creek, which discharges itself into Mexico bay, on Lake Ontario, in the state of New York, for the purpose of constructing a harbour at that place, and ascertaining the cost of the same, three hundred dollars.

Surveying mouth of Sandy Creek.

For making a survey and examination of the southern shore of Lake Ontario, in the state of New York, between Genessee and Oswego rivers, with a view to the improvement of the most accessible and commodious harbours on the frontier, by erecting piers, or other works, and estimates of the costs of the same, four hundred dollars.

Survey of southern shore of Lake Ontario.

For deepening the channel through the *pass au Heron*, near the Bay of Mobile, eighteen thousand dollars.

Deepening Pass au Heron, Mobile.

For deepening the channel at the mouth of Pascagoula river, seventeen thousand five hundred dollars, in addition to the sum before appropriated for that object.

Deepening Pascagoula River.

Obstructions to navigation, Wabash River.

For surveying the obstructions to the navigation of the Wabash river, between its mouth and Eel river, five hundred dollars.

Mississippi and Ohio rivers.

Towards improving the navigation of the Mississippi and Ohio rivers, the sum of fifty thousand dollars.

Removing obstructions in Berwick Branch.

For removing obstructions in the Berwick branch of the Piscataqua river, eight thousand dollars.

Deepening channel, St. Marys Harbor, Ga.

For deepening the inland passage, or present channel, for navigation between the St. John's river in Florida, and St. Mary's harbour, in Georgia, the sum of thirteen thousand five hundred dollars.

Survey of river St. Marks, Fla.

For a survey of the river and harbour of St. Marks, in Florida, with a view to the practicability and expense of deepening the same, the sum of five hundred dollars.

* * * * *

Approved, May 23, 1828.

May 23, 1828.
Vol. 4, p. 290.

CHAP. 75.—An Act To grant certain relinquished and unappropriated lands to the State of Alabama, for the purpose of improving the navigation of the Tennessee, Coosa, Cahawba, and Black Warrior rivers.

400,000 acres of relinquished lands in certain counties in Alabama granted to State to be applied to navigation.

1832, c. 301; 1833, c. 90; 1836, c. 119.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That four hundred thousand acres, of the relinquished lands in the counties of Madison, Morgan, Limestone, Lawrence, Franklin, and Lauderdale, in the State of Alabama, be, and the same is [are] hereby, granted to said state, to be applied to the improvement of the navigation of the Muscle Shoals, and Colbert's Shoals, in the Tennessee river, and such other parts of said river within said State as the legislature thereof may direct: But if there shall not be four hundred thousand acres of relinquished unappropriated land in said counties, the deficiency to be made up out of any unappropriated lands in the county of Jackson, in said State.

Price at which land is to be sold.

SEC. 2. *And be it further enacted,* That said state of Alabama, shall have power to sell, dispose of and grant said land, for the purposes aforesaid, at a price not less than the minimum price of the public lands of the United States, at the time of such sale.

Improvements. 1830, c. 79.

SEC. 3. *And be it further enacted,* That the said state of Alabama shall commence said improvements within two years after the passage of this act, and complete the same within ten years thereafter.

Grant of all lands to become null and void if applied to any other object whatever.

SEC. 4. *And be it further enacted,* That if said state of Alabama shall apply the lands hereby granted, or the proceeds of the sales, or any part thereof, to any other use or object whatsoever, than as directed by this act, before said improvements shall have been completed, the said grant for all lands then unsold shall thereby become null and void; and the said state of Alabama shall become liable and bound to pay to the United States the amount for which

said land, or any part thereof, may have been sold, deducting the expenses incurred in selling the same.

SEC. 5. *And be it further enacted*, That the improvements of said navigation shall be commenced at the lowest point of obstruction in said river, within said state, continued up the same until completed, and be calculated for the use of steamboats, according to such plan of construction as the United States' engineers, appointed to survey and report thereon, may recommend, and the President of the United States approve: *Provided*, That such plan shall embrace, if practicable, a connexion [*sic*] of the navigation of Elk river, with the said improvements.

Improvements of navigation shall be commenced, etc.

1831, c. 23.

Proviso.

SEC. 6. *And be it further enacted*, That after the completion of said improvements, the surplus of said grant, if any, shall be applied to the improvement of the navigation of the Coosa, Cahawba, and Black Warrior rivers, in said state, under the direction of the Legislature thereof.

Surplus of grant to be applied, etc.

SEC. *And be it further enacted*, That the said rivers, when improved as aforesaid, shall remain forever free from toll for all property belonging to the government of the United States, and for all persons in their service, and for all the citizens of the United States, unless a toll shall be allowed by act of Congress.

Rivers, when improved, to be ever free from toll for all property belonging to United States, etc.

Approved, May 23, 1828.

CHAP. 76.—An Act Making an appropriation for the erection of a breakwater near the mouth of Delaware bay.

May 23, 1828.
Vol. 4, p. 290.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the President of the United States cause to be made near the mouth of Delaware bay, a breakwater.

Delaware Breakwater, Del.

SEC. 2. *And be it further enacted*, That the sum of two hundred and fifty thousand dollars be, and it hereby is, appropriated, towards the accomplishment of that object, and that the same be paid out of any money in the Treasury not otherwise appropriated.

\$250,000 appropriated.

Approved, May 23, 1828.

CHAP. 86.—An Act Authorizing a subscription to the stock of the Chesapeake and Ohio Canal Company.

May 24, 1828.
Vol. 4, p. 293.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to subscribe, in the name and for the use of the United States, for ten thousand shares of the capital stock of the Chesapeake and Ohio Canal Company, and to pay for the same, at such times, and in such proportions, as shall be required of and paid by the stockholders, generally, by the rules and regulations of the company, out of the

Secretary of Treasury to subscribe for 10,000 shares of capital stock of Chesapeake and Ohio Canal Co.

Proviso. dividends which may accrue to the United States upon their bank stock in the bank of the United States: *Provided*, That not more than one-fifth part of the sum, so subscribed for the use of the United States, shall be demanded, in any one year, after the organization of the said company; nor shall any greater sum be paid on the shares so subscribed for, than shall be proportioned to assessments made on individual or corporate stock-holders: *And provided, moreover*, That, for the supply of water to such other canals as the state of Maryland, or Virginia, or the Congress of the United States, may authorize to be constructed, in connection with the Chesapeake and Ohio Canal, the section of the said canal leading from the head of the Little Falls of the Potomac river, to the proposed basin, next above Georgetown, in the District of Columbia, shall have the elevation, above the tide of the river at the head of the said falls, and shall preserve, throughout the whole section aforesaid, a breadth, at the surface of the water, of not less than sixty feet, and a depth, below the same, of not less than five feet, with a suitable breadth at bottom.

Secretary of Treasury to vote for president, etc., of company, according to number of shares purchased.

SEC. 2. *And be it further enacted*, That the said Secretary of the Treasury shall vote for the president and directors of the said company, according to such number of shares as the United States may at any time hold in the stock, thereof, and shall receive, upon the said stock, the proportion of the tolls which shall, from time to time, be due to the United States for the shares aforesaid; and shall have and enjoy, in behalf of the United States, every other right of a stockholder in the said company.

Approved, May 24, 1828.

May 24, 1828.
Vol. 4, p. 308.

CHAP. 110.—An Act Declaring the assent of Congress to an Act of the State of Alabama.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the assent of Congress be, and hereby is, granted to the operation of an act of the general assembly of the state of Alabama, passed on the tenth day of January, one thousand eight hundred and twenty-seven, entitled "An act to incorporate the Cahawba Navigation Company."

Approved, May 24, 1828.

Assent of Congress given to act of Alabama, Jan. 10, 1827.

Mar. 2, 1829.
Vol. 4, p. 345.

CHAP. 25.—An Act Making appropriations for building light-houses and beacons, and placing buoys, and for improving harbours and directing surveys.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * *

Sums of money to be placed at disposition of President.

SEC. 2. *And be it further enacted*, That the sums of money appropriated by this section be, and the same are hereby, directed to be paid out of any money in the treasury not otherwise appropriated, and placed at the disposition of the

President of the United States, for the following specified purposes or objects, to wit:

State of Maine: Five thousand dollars for repairing the pier on the eastern side of the channel at the entrance of Kennebunk river; and Kennebunk River, etc., Me.

Three hundred dollars for surveying the ship channel of Penobscot river, from Whitehead to Bangor, and ascertaining the cost of improving the navigation of the same, and proper sites for spindles and buoys. Penobscot River, Me.

State of New Hampshire: Sixty dollars for making a survey of Cochecho branch of Piscataqua river, from Dover falls to its confluence with the Piscataqua, for the purpose of ascertaining the practicability of removing obstructions to navigation and the cost. Piscataqua River, etc., N. H.

State of Massachusetts: One hundred and eighty dollars for surveying North river, between Scituate and Marshfield, to ascertain the expediency of removing obstructions at the mouth of the same, and to make an estimate of the cost. North River, etc., Mass.

One hundred and fifty dollars for examining the piers erected at Sandy bay, to report the condition of the same, and what works are necessary to make a good and safe harbour, at that place, together with an estimate of the cost. Sandy Bay (Rockport Harbor), Mass.

Thirty thousand dollars for removing the bar at the mouth of the harbour of Nantucket. Nantucket, Mass.

Two thousand five hundred dollars for extending the pier on which the light house is built, at the entrance of Edgartown harbour, to the shore; and Edgartown Harbor, Mass.

One hundred and fifty dollars to survey the harbour at Bass river, between Yarmouth and Dennis, to ascertain the practicability and expense of improving the said harbour. Bass River, Mass.

State of Connecticut: Six thousand and ninety-seven dollars for improving the navigation of Mill river by removing obstructions in the said river, and constructing such works as will prevent the sand from filling up the channel of the same. Mill River (Southport Harbor), Conn.

One hundred and fifty dollars for making a survey of the river Thames, with a view to improve the navigation of the same, and the cost of such improvements. Thames River, Conn.

One hundred and thirty dollars for making a survey of the harbour of Westbrook, near the mouth of Connecticut river, with a view to the improvement of the said harbour, and for ascertaining the cost of such improvement. Westbrook Harbor, Conn.

Eighty dollars for making a survey of the harbour of Norwalk, with a view to its improvement. Norwalk Harbor, Conn.

One hundred dollars for making a survey of the harbour of Stamford, with a view to its improvement. Stamford Harbor, Conn.

* * * * *

State of New York: One hundred and fifty dollars for surveying the bar at the mouth of Sag Harbor, to ascertain the best method of preventing the harbour being filled up with sand, and the cost of the same. Sag Harbor, N. Y.

Thirty thousand dollars for extending the pier of Black Rock harbour, at the outlet of Lake Erie, to a point opposite Bird's Island. Black Rock Harbor, N. Y.

- Sodus Bay, N. Y. For removing obstructions at the entrance of the harbour at Big Sodus Bay, on Lake Ontario, twelve thousand five hundred dollars.
- Genesee River (Charlotte Harbor), N. Y. For the improvement of the navigation of the Genessee river, in the state of New York, ten thousand dollars.
- Flat Beach, N. J. State of New Jersey: One hundred dollars for surveying Flatbeach, alias Tucker's Island, situated between Old and New Inlet, with a view to preserve the anchorage of the port, and to report an estimate of the cost of such improvements as may be necessary to effect those objects.
- Marcushook, Pa. State of Pennsylvania: Five thousand dollars for repairing the piers at Marcus Hook: for filling up the sluice between the said piers, and improving the harbour of Marcus Hook, by the removal of obstructions.
- Deep Creek, Va. State of Virginia: Eighty dollars for making a survey of Deep creek, or branch of the South branch of Elizabeth river, for the purpose of improving the navigation of the same, and an estimate of cost.
- Pasquotank River, N. C. State of North Carolina: Eighty dollars for making a survey of Pascotank river, for removing bars, or obstructions in the same, and an estimate of the cost.
- Ocracoke Inlet, N. C. Twenty-one thousand dollars, being an additional appropriation, for effecting the removal of the shoals forming obstructions to navigation near Ocracoke Inlet; and
- Cape Fear River, N. C. Twenty thousand dollars for improving the navigation of Cape Fear river, between the town of Wilmington and the mouth of the said river.
- * * * * *
- Conneaut Creek, Ohio. State of Ohio: Seven thousand five hundred dollars for improving the navigation of Conneaut creek, by removing the bar at the mouth of the same.
- Teche Bayou, La. State of Louisiana: Two hundred dollars for making a survey of the entrance of the river Teche, with a view to improve and shorten the navigation of the same, and an estimate of the cost of such improvements.
- Mississippi River, La. Five hundred dollars for making a survey at the passes, at the mouth of the Mississippi, with a view to improvements in the navigation, and building lighthouses and buoys.
- * * * * *
- Mobile Harbor, Ala. State of Alabama: Twenty thousand dollars, the sum required for completing improvements in the harbour of Mobile.
- St. Augustine Harbor, Fla. Territory of Florida: Three hundred dollars for making a survey of the harbour of St. Augustine, and the bar at or near the entrance of the same, with a view to remove the latter, and to render the access to the harbour safe at all times, and to make an estimate of the cost of accomplishing that object; and
- St. Marks Harbor, Fla. Six thousand five hundred dollars for improving the harbour of St. Mark's, by removing obstructions in the same.

Approved, March 2, 1829.

CHAP. 26.—An Act Making additional appropriations for the military service in the United States, for the year one thousand eight hundred and twenty-nine.

Mar. 2, 1829.
Vol. 4, p. 348.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

The following sums, transferred to the surplus fund, on the thirty-first of December, one thousand eight hundred and twenty-eight, are hereby re-appropriated:

Transfers to surplus fund re-appropriated.

For the preservation of the point of land forming Provincetown harbour, appropriated by act of twentieth of May, one thousand eight hundred and twenty-six, three thousand five hundred dollars.

Provincetown Harbor.
1826, c. 78.

For removing obstructions in the harbour of Mobile, appropriated by act of twentieth of May, one thousand eight hundred and twenty-six, two thousand eight hundred and seventy-one dollars and twenty-two cents.

Mobile Harbor
1826, c. 78.

For piers at Newcastle, appropriated by act of the twentieth of May, one thousand eight hundred and twenty-six, seventeen thousand eight hundred and ninety-five dollars and ninety-nine cents.

Newcastle.
1826, c. 78.

* * * * *

SEC. 3. *And be it further enacted,* That the several sums, hereby appropriated, shall be paid out of any money in the treasury not otherwise appropriated.

Appropriations to be paid out of Treasury.

Approved, March 2, 1829.

CHAP. 27.—An Act Authorizing the subscription of stock in the Chesapeake and Delaware Canal Company, and in the Dismal Swamp Canal Company.

Mar. 2, 1829.
Vol. 4, p. 350.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That

the Secretary of the Treasury be, and he is hereby, authorized and directed to subscribe, in the name and for the use of the United States, for seven hundred and fifty shares of the capital stock of the Chesapeake and Delaware Canal Company; and, also, for two hundred shares of the capital stock in the Dismal Swamp Canal Company, and pay for the same, at such times, and in such proportions, as may be required by the said companies respectively; to be paid out of any money in the Treasury not otherwise appropriated.

Secretary of Treasury to subscribe for 750 shares of Chesapeake and Delaware Canal.

Secretary of Treasury to subscribe for 200 shares of Dismal Swamp Canal.

SEC. 2. *And be it further enacted,* That the Secretary of the Treasury shall vote for president and directors of the said companies respectively, according to such number of shares, and shall receive upon the said stock the proportion of the tolls which shall, from time to time, be due to the United States for the shares expended.

Secretary of Treasury to vote for president and directors, and receive dividends.

Approved, March 2, 1829.

Mar. 2, 1829.
Vol. 4, p. 351.

CHAP. 29.—An Act Making appropriations for completing certain roads, and for making examinations and surveys.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby appropriated, to wit:

* * * * *

Surveys, etc.,
under act Apr.
30, 1824, c. 46.

For defraying the expenses incidental to making examinations and surveys under the act of thirtieth of April, one thousand eight hundred and twenty-four, thirty thousand dollars.

* * * * *

SEC. 2.—*And be it further enacted, That the several sums, hereby appropriated, shall be paid out of any money in the treasury not otherwise appropriated.*

Approved, March 2, 1829.

Mar. 2, 1829.
Vol. 4, p. 353.

CHAP. 33.—An Act To authorize a subscription for stock on the part of the United States, in the Louisville and Portland Canal Company.

Forfeited stock
in Louisville and
Portland Canal
to be purchased
by United States.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he hereby is, authorized and directed to subscribe for or purchase, in the name and for the use of the United States, any stock which may have been forfeited to the company, and which shall be undisposed of on the fourth day of March next, not exceeding thirteen hundred and fifty shares of the Capital Stock of the Louisville and Portland Canal Company; and to pay for the same, when called upon by said Company, out of any money in the Treasury not otherwise appropriated: Provided, Said shares can be had for a sum not exceeding one hundred dollars each.

Secretary of
Treasury to vote,
etc.

SEC. 2. *And be it further enacted, That the said Secretary of the Treasury shall vote for president and directors of said company, according to such number of shares, and shall receive upon the said stock, the proportion of the tolls which shall, from time to time, be due to the United States for the stock aforesaid.*

Approved, March 2, 1829.

Mar. 2, 1829.
Vol. 4, p. 356

CHAP. 37.—An Act Making additional appropriations for certain fortifications of the United States, for the year one thousand eight hundred and twenty-nine.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby appropriated, in addition to the several sums appropriated by the act of the twenty-fourth of May, one thousand eight

hundred and twenty-eight, for certain fortifications of the United States, for the first quarter of the year one thousand eight hundred and twenty-nine, to wit: for fortifications, to each specifically, as follows:

* * * * *

For completion of the sea wall for the preservation of George's Island, in Boston harbour, seven thousand three hundred and ten dollars and fifty-four cents. Boston Harbor.

SEC. 2. *And be it further enacted*, That the several sums, hereby appropriated, shall be paid out of any money in the treasury not otherwise appropriated.

Approved, March 2, 1829.

CHAP. 52.—An Act Making additional appropriations for completing and repairing piers, for the improvement of certain harbours, and of the navigation of certain rivers. Mar. 3, 1829.
Vol. 4, p. 363.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to wit:

For repairing the damages sustained by the piers under construction at the mouth of Oswego river, from a severe gale in October last, seven thousand four hundred and seventy-two dollars. Piers at Oswego River.

For closing the breach made in the peninsula at Presque Isle Bay, Pennsylvania, seven thousand three hundred and ninety dollars and twenty-five cents. Presque Isle Bay (Erie Harbor).

For completing the erection of piers at the mouth of Dunkirk harbour, in the State of New York, nine thousand eight hundred and twelve dollars and seventy-five cents. Dunkirk Harbor.

For completing the removal of obstructions at the mouth of Ashtubula Creek, Ohio, six thousand nine hundred and forty dollars and twenty-five cents. Ashtubula Creek.

For completing the removal of obstructions at the mouth of Cunningham Creek, Ohio, two thousand nine hundred and fifty-six dollars. Cunningham Creek.

For improving Cleveland harbour, Ohio, twelve thousand one hundred and seventy-nine dollars. Cleveland Harbor.

For completing the removal of obstructions at the mouth of Huron river, Ohio, five thousand nine hundred and thirty-five dollars. Huron River.

For completing a pier at La Plaisance bay, Michigan territory, two thousand three hundred and eighteen dollars. La Plaisance Bay.

For continuing to improve the navigation of the Ohio and Mississippi rivers, fifty thousand dollars. Ohio and Mississippi rivers.

For removing obstructions in the Savannah river, below the city of Savannah, in Georgia, being a balance of appropriations carried to the surplus fund on the thirty-first of December, one thousand eight hundred and twenty-eight, twenty-four thousand four hundred and ninety dollars. Reappropriation of balance for Savannah River carried to surplus fund.

SEC. 2. *And be it further enacted*, That the several sums, hereby appropriated, shall be paid out of any money in the Treasury not otherwise appropriated.

Approved, March 3, 1829.

Apr. 23, 1830.
Vol. 4, p. 394.

CHAP. 72.—An Act Making additional appropriations for the improvement of certain harbours, and for removing obstructions at the mouths of certain rivers, for the year one thousand eight hundred and thirty.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and the same are hereby, appropriated for carrying on and completing certain works heretofore commenced, to be paid out of any money in the treasury, not otherwise appropriated, viz:

Huron River.

For removing obstructions at the mouth of Huron river, Ohio, one thousand eight hundred and eighty dollars and thirty-six cents.

Grand River
(Fairport Har-
bor).

For completing the removal of obstructions at the mouth of Grand River, Ohio, five thousand five hundred and sixty-three dollars and eighteen cents.

Cleveland Har-
bor.

For completing the improvements of Cleaveland harbour, Ohio, one thousand seven hundred and eighty-six dollars and fifty-six cents.

Black River
(Lorain Harbor).

For removing sand-bar at or near the mouth of Black river, Ohio, eight thousand five hundred and fifty-nine dollars and seventy-seven cents.

Conneaut Creek.

For improving the navigation of Conneaut creek, Ohio, six thousand one hundred and thirty five dollars and sixty-five cents.

Dunkirk Har-
bor.

For completing piers at the mouth of Dunkirk harbour, New York, one thousand three hundred and forty-two dollars and seventy-five cents.

Buffalo Harbor.

For completing piers at Buffalo harbour, New York, fifteen thousand four hundred and eighty-eight dollars.

Black Rock,
N. Y.

For extending the pier at Black Rock, three thousand one hundred and ninety-eight dollars.

Genesee River
(Charlotte Har-
bor).

For improving the navigation of Genesee river, New York, thirteen thousand three hundred and thirty-five dollars.

Great Sodus
Bay.

For removing obstructions at the mouth of Big Sodus bay, New York, fifteen thousand two hundred and eighty dollars.

Merrimack
River.

For completing the removal of the sand-bar at or near the mouth of Merrimack river, Massachusetts, three thousand five hundred and six dollars and seventy-two-cents.

Plymouth
beach.

For the preservation of Plymouth beach, Massachusetts, one thousand eight hundred and fifty dollars.

Stonington
Harbor.

For erecting piers or other works at or near Stonington harbour, Connecticut, sixteen thousand four hundred and ninety-one dollars and sixty-seven cents.

For deepening an inland passage between St. John's and St. Mary's rivers, fifteen hundred dollars. Passage between St. Johns, etc.

For improving the navigation of the Mississippi and Ohio rivers, fifty thousand dollars. Mississippi and Ohio Rivers.

For removing obstructions to the navigation of the Kennebec river, at Lovejoy's narrows, Maine, five thousand dollars. Kennebec River.

For improving the harbours of New Castle, Marcus Hook, Chester, and Port Penn, in the Delaware river, ten thousand dollars. Harbors of Newcastle, etc.

For improving the Cape Fear river, below Wilmington, North Carolina, twenty-five thousand six hundred and eighty-eight dollars. Cape Fear River.

For completing the removal of obstructions in the Apalachicola river, in Florida, two thousand dollars. Apalachicola River.

For completing the removal of obstructions in the river and harbour of St. Marks in Florida, ten thousand dollars. St. Marks River.

For completing the breakwater at Hyannis harbour, in Massachusetts, six thousand five hundred and seventeen dollars and eighty-two cents. Breakwater at Hyannis.

For carrying on the works of the Delaware breakwater, for the year one thousand eight hundred and thirty, one hundred thousand dollars; and for carrying on the same works during the first quarter of one thousand eight hundred and thirty-one, sixty-two thousand dollars. Delaware Breakwater.

Approved, April 23, 1830.

CHAP. 79.—An Act To extend the time for commencing the improvement of the navigation of the Tennessee River. Apr. 24, 1830.
Vol 4, p. 397.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the time for commencing the improvement of the navigation of the Tennessee river, under an act of Congress "to grant certain relinquished and unappropriated lands to the state of Alabama, for the purpose of improving the navigation of the Tennessee, Cahawba, and Black Warrior rivers," approved the twenty-third day of May, one thousand eight hundred and twenty-eight, be, and the same is hereby, extended to the first day of December next. Time for commencing etc., extended to Dec. 1, 1830.
Act May 23, 1828, c. 75.

Approved, April 24, 1830.

CHAP. 84.—An Act For the re-appropriation of certain unexpended balances of former appropriations. Apr. 30, 1830.
Vol. 4, p. 397.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums, being unexpended balances of former appropriations for sundry objects of the service of the War Department, * * * which remained in the Treasury on the last day of the year one thousand eight hundred and twenty-nine, and are now subject to the provisions of* Reappropriation of balances carried to surplus fund.

the law directing such balances to be carried to the account of the surplus fund, be, and the same are hereby re-appropriated to the several objects, respectively, of their original appropriation.

* * * * *

Saugatuck
River, Conn.

For the removing obstructions in the Saugatuck river, twenty-eight dollars.

La Plaisance
Bay.

For the building of piers at the entrance of La Plaisance bay, eighty-nine dollars and eleven cents.

* * * * *

Approved, April 30, 1830.

May 31, 1830.
Vol. 4, p. 427.

CHAP. 232.—An Act Making appropriations for examinations and surveys, and also, for certain works of internal improvement.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, viz:

Examinations
and surveys.

Apr. 30, 1824,
c. 46.

\$30,000.

For defraying the expenses incidental to making examinations and surveys for national works, under the act of thirtieth April, one thousand eight hundred and twenty-four, including five thousand one hundred and four dollars and twenty-seven cents, for arrearages on account of surveys and office rent, in the years one thousand eight hundred and twenty-six, one thousand eight hundred and twenty-seven, and one thousand eight hundred and twenty-eight, thirty thousand dollars.

* * * * *

Canal between
waters of At-
lantic and Gulf
of Mexico.

For completing the survey and estimate of a canal to connect the waters of the Atlantic with the Gulf of Mexico, ten thousand four hundred dollars. And it shall be the duty of the Secretary of War to cause a detailed report to be made out, showing the practicability or impracticability of making a ship or other canal, and the reasons for either, with an estimate of the probable expense and advantages of such canal as may be considered practicable.

* * * * *

Approved, May 31, 1830.

Feb. 12, 1831.
Vol. 4, p. 441.

CHAP. 23.—An Act To amend the Act granting “certain relinquished and unappropriated lands to the State of Alabama, for the purpose of improving the navigation of the Tennessee, Coosa, Cahawba, and Blackwarrior rivers,” approved the twenty-third day of May, one thousand eight hundred and twenty-eight.

State of Ala-
bama authorized
to contract, etc.
Act May 23,
1828, c. 75.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That it shall and may be lawful for the state of Alabama, by the board of canal commissioners appointed by her for that purpose, to contract for and construct that part of the canal round the Muscle shoals, beginning at Campbell’s ferry,

and running up the river to Lamb's ferry, before they contract for, or complete that part of the said contemplated canal between Campbell's ferry and Florence; any thing in the act to which this is an amendment to the contrary notwithstanding.

SEC. 2. *And be it further enacted*, That it shall be the duty of the engineers of the United States who have this matter in charge, to furnish to said board of commissioners, as soon as practicable, a plan of that section of the canal above contemplated first to be executed, connecting it with the river at or near to Campbell's ferry, and at the most eligible point at, or immediately below Lamb's ferry, on the cheapest practicable plan, in conformity with said original act, to be approved by the President of the United States.

United States
engineers to fur-
nish plan.

SEC. 3. *And be it further enacted*, That the section of said canal above Lamb's ferry, shall, by said engineers, be so planned as to connect it with the deep water in the river at or above Lamb's ferry; and the section below Campbell's ferry, shall, in like manner, be connected with the deep water at or below said last-mentioned ferry.

Plan prescribed.

Approved, February 12, 1831.

CHAP. 38.—An Act Making appropriations for certain fortifications during the year one thousand eight hundred and thirty-one.

Mar. 2, 1831.
Vol. 4, p. 450.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the treasury, for certain fortifications, viz:

For the preservation of George's Island, Boston harbour,

Georges Island.

* * * * *

Approved, March 2, 1831.

CHAP. 56.—An Act Making additional appropriations for the improvement of certain harbours, and removing obstructions in the mouths of certain rivers.

Mar. 2, 1831.
Vol. 4, p. 459.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, for carrying on and completing certain works heretofore commenced, to be paid out of any money in the Treasury not otherwise appropriated, viz:

For removing obstructions at the mouth of Huron river, Ohio, three thousand four hundred and eighty dollars.

Huron River.

For removing sand bar at or near the mouth of Black river, Ohio, nine thousand two hundred and seventy-five dollars.

Black River
(Lorain Harbor).

- Cleveland Har-
bor. For completing the improvement of Cleaveland harbour,
Ohio, three thousand six hundred and seventy dollars.
- Grand River
(Fairport Har-
bor). For completing the removal of obstructions at the mouth
of Grand river, Ohio, five thousand six hundred and eighty
dollars.
- Ashtabula
Creek. For completing the removal of obstructions at the mouth
of Ashtabula creek, Ohio, seven thousand and fifteen dol-
lars.
- Conneaut
Creek. For improving the navigation of Conneaut creek, Ohio,
six thousand three hundred and seventy dollars.
- Presque Isle
(Erie Harbor). For completing the improvement of the harbour of
Presque isle, Pennsylvania, one thousand seven hundred
dollars.
- Genesee River
(Charlotte Har-
bor). For improving the navigation of Genesee river, New
York, sixteen thousand six hundred and seventy dollars.
- Great Sodus
Bay. For removing obstructions at the mouth of Big Sodus
bay, New York, seventeen thousand four hundred and fifty
dollars.
- Oswego. For completing piers at Oswego, New York, two thou-
sand eight hundred and twelve dollars and ninety-two
cents.
- Contractors. For claim of contractors for losses by storms in eighteen
hundred and twenty-nine, five hundred and nineteen dol-
lars.
For balance due contractors for said piers, eighty-four
dollars and ninety-two cents.
- Oswego. For securing the works of Oswego harbour, New York,
by a stone pier-head and mole, eighteen thousand six hun-
dred dollars.
- Buffalo. For completing the pier at the mouth of Buffalo har-
bour, New York, twelve thousand nine hundred dollars.
- Dunkirk. For securing and completing the works at the harbour
of Dunkirk, New York, six thousand four hundred dollars.
- Provincetown. For further protection and preservation of the beach of
Provincetown, Massachusetts, two thousand and fifty dol-
lars.
- Merrimack
breakwater. For the repair and completion of the breakwater at the
mouth of Merrimack river, Massachusetts, sixteen thou-
sand dollars.
- Kennebunk
River. For completing repairs to piers at the entrance of Ken-
nebunk river, Maine, one thousand one hundred and sev-
enty-five dollars.
- Deer Island. For completing the sea wall for the preservation of Deer
island, Boston harbour, Massachusetts, twelve thousand
three hundred and ninety dollars.
- Plymouth
beach. For repairing Plymouth beach, Massachusetts, two thou-
sand eight hundred and twenty dollars.
- Hyannis break-
water. For completing the breakwater at Hyannis harbour,
Massachusetts, eight thousand four hundred dollars.
- Nantucket. For removing the bar at the mouth of Nantucket har-
bour, Massachusetts, eight thousand two hundred and
sixty-five dollars.
- Newcastle, etc. For improving the harbours of New Castle, Marcus

Hook, Chester, and Port Penn, in the Delaware river, four thousand dollars.

For improving Cape Fear river, below Wilmington, North Carolina, twenty-five thousand seven hundred and five dollars. Cape Fear River.

For carrying on the works for the improvements of Ocracoke inlet, in North Carolina, seventeen thousand dollars. Ocracoke Inlet.

For completing the removal of obstructions in the river and harbour of St. Mark's, Florida, *[sic]* seven thousand four hundred and thirty dollars. St. Marks.

For completing the removal of obstructions in the Appalachicola river, Florida, eight thousand dollars. Apalachicola River.

For arrearage due Major Birch for survey of the raft of Red River, Louisiana, one hundred and eighty-seven dollars and fifty cents. Red River.

For arrearage due the superintendent of the works at Black Rock harbour, New York, one thousand eight hundred dollars. Black Rock.

For arrearage due for materials delivered to the works at Dunkirk harbour, New York, seven hundred and two dollars, fifty cents. Dunkirk.

For carrying on the work of the Delaware breakwater, two hundred and eight thousand dollars. Delaware Breakwater.

Approved, March 2, 1831.

CHAP. 58.—An Act Making appropriations for carrying on certain roads and works of internal improvement, and for providing for surveys. Mar. 2, 1831.
Vol. 4, p. 462.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated to the several objects respectively herein named, to be applied during the year one thousand eight hundred and thirty-one, the same to be paid out of any money in the Treasury not otherwise appropriated, viz:

* * * * *

For defraying the expenses incidental to making examinations and surveys under the act of the thirtieth day of April, one thousand eight hundred and twenty-four, twenty-five thousand dollars. Surveys, etc.
1824, c. 46.

For improving the navigation of the Ohio and Mississippi rivers, to be expended under the existing laws, fifty thousand dollars. Navigation of Ohio and Mississippi rivers.

That the sum of one hundred and fifty thousand dollars be, and the same is hereby appropriated to the improvement of the navigation of the Ohio and Mississippi rivers from Pittsburg to New Orleans, in removing the obstructions in the channels at the shoal places and ripples, and by such other means as may be deemed best for the deepening of

To be expended
under direction
of President.

the channels of the Ohio River, which said sum shall be expended under the direction of the President of the United States, by the superintendent appointed to execute said works of improvement; and the President is hereby authorized and required to take bond with approved security in fifty thousand dollars conditioned for the faithful performance of the duties required of him under such instructions as may be given him for the improvement of the navigation of said rivers, and that an officer of engineers be associated with said superintendent, with authority to suspend the operation of any work, or payment of any account, until the order of the President is received.

* * * * *

Approved, March 2, 1831.

Feb. 24, 1832.
Vol. 4, p. 497.

CHAP. 27.—An Act Making appropriations for fortifications for the year one thousand eight hundred and thirty-two.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and they are hereby, appropriated, for fortifications for the year one thousand eight hundred and thirty-two, viz:

* * * * *

Georges Island
(Boston Harbor.)

For the preservation of George's Island, nine thousand dollars.

* * * * *

Approved, February 24, 1832.

July 3, 1832.
Vol. 4, p. 551.

CHAP. 153.—An Act Making appropriations for certain internal improvements for the year one thousand eight hundred and thirty-two.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be appropriated for the purpose of making the improvements hereinafter enumerated, viz:

Kennebec
River, Me.

For removing obstructions to the navigation of Kennebec river, at Lovejoy's Narrows, Maine, including a balance of former appropriations, of two thousand five hundred and seventy-nine dollars and sixty-eight hundredths, carried to the surplus fund, two thousand six hundred dollars.

Plymouth
Beach, Mass.

For repairing Plymouth Beach, Massachusetts, two thousand five hundred dollars.

Provincetown,
Mass.

For further protection and preservation of the Beach at Provincetown, Massachusetts, four thousand six hundred dollars.

Pass au Heron,
Ala.

For deeping the channel through the Pass au Heron, Alabama, being the balance of the appropriation of one thousand eight hundred and twenty-eight, carried to the surplus fund, first January, one thousand eight hundred and thirty-one, six thousand and fifty dollars.

1828, c. 73.

For deepening the channel at Pascagoula river, being the balance of the appropriation of one thousand eight hundred and twenty-five, carried to the surplus fund the first of January, one thousand eight hundred and thirty, fifteen thousand nine hundred dollars. Pascagoula River, Ala.

For improving the navigation of the Red river, Louisiana, and Arkansas, being the balance of the appropriation of one thousand eight hundred and twenty-eight, carried to the surplus fund, two thousand six hundred and twenty-eight dollars, and the further sum of twenty thousand dollars. Red River, La. and Ark.
1828, c. 73.

For carrying on the work of the Delaware breakwater, two hundred and seventy thousand dollars. Delaware Breakwater, Del.

For the completion of the improvement of the harbour and river Saint Marks, in Florida, as recommended by the chief engineer, four thousand five hundred dollars. St. Marks River, Fla.

For completing repairs to piers at the entrance of Kennebunk river, Maine, one thousand seven hundred dollars. Kennebunk River, Me.

For removing obstructions in the Berwick branch of the Piscataqua river, two hundred and fifty dollars. Piscataqua River, Me.

For completing the sea-wall for the preservation of Deer Island, Boston harbour, sixty thousand dollars. Deer Island, Mass.

For completing the breakwater at Hyannis harbour, Massachusetts, seven thousand six hundred dollars. Breakwater at Hyannis, Mass.

For removing the bar at the mouth of Nantucket harbour, six thousand dollars. Nantucket, Mass.

For completing the breakwater and dyke, and deepening the channel, in the harbor of Mill river, in Connecticut, four thousand four hundred and ninety dollars and forty-three cents. Mill River (Southport Harbor).

For completing the pier and mole at Oswego, New York, nineteen thousand dollars. Oswego, N. Y.

For removing obstructions at the mouth of Big Sodus bay, New York, seventeen thousand dollars. Great Sodus Bay, N. Y.

For improving the entrance of Genesee river, sixteen thousand dollars. Genesee River (Charlotte Harbor), N. Y.

For completing the pier at the mouth of Buffalo harbour, ten thousand three hundred dollars. Buffalo Harbor, N. Y.

For the work at Black Rock harbour, New York, five thousand one hundred dollars. Black Rock, N. Y.

For securing and completing the work at Dunkirk harbour, New York, ten thousand two hundred dollars. Dunkirk, N. Y.

For completing the improvement of the harbor at Presque Isle, Pennsylvania, four thousand five hundred dollars. Presque Isle (Erie) Harbor.

For improving the harbours of New Castle, Marcus Hook, Chester, and Port Penn, on the Delaware, ten thousand dollars. Newcastle, etc., Pa.

For carrying on the work for the improvement of Ocracoke inlet, North Carolina, twenty-two thousand dollars. Ocracoke Inlet, N. C.

For improving Cape Fear river, below Wilmington, North Carolina, twenty-eight thousand dollars. Cape Fear River, N. C.

For improving the navigation of the Ohio, Missouri, and Mississippi rivers, fifty thousand dollars. Ohio, Missouri, and Mississippi rivers.

President authorized to improve steamboat navigation from Pittsburg to Brownsville, and to extend provisions of act of May 24, 1824, c. 139, to embrace certain parts of Missouri and Mississippi rivers.

And the President of the United States is hereby authorized to extend the improvement of the steamboat navigation from Pittsburg to the Cumberland road, at Brownsville, upon such plan as he may approve, under the provisions of the act of May twenty-four, eighteen hundred and twenty-four:

And that the President of the United States be, and he is hereby, authorized to extend the provisions of the act of twenty-fourth May, one thousand eight hundred and twenty-four, entitled "An act to improve the navigation of the Ohio and Mississippi rivers," so as to embrace in its operations the river Missouri, from its junction with the Mississippi to the mouth of the Kansas river;

And, also, the Upper Mississippi river from St. Louis, in Missouri, to Galena, in Illinois, with power to remove all obstructions in the channel of said river between those points;

And that the provisions of the act, approved twenty-fourth May, one thousand eight hundred and twenty-four, entitled "An act to improve the navigation of the Ohio and Mississippi rivers," be extended so as to include, in its operation, the improvement of the Mississippi from New Orleans to the Gulf of Mexico, and the deepening of the bar at the mouth of the Mississippi.

Arkansas River.

Proviso.

For improving the navigation of the Arkansas river, fifteen thousand dollars; *Provided*, The engineer department, after due examination, is satisfied that, during a portion of the ensuing year, the men and machine now employed in removing obstructions in the Ohio and Mississippi rivers, can be more usefully employed in removing those of the Arkansas river: *Provided*, That the compensation of the superintendent of the Ohio and Mississippi rivers, shall be the sum of three thousand dollars per annum, in full for all his services; and he shall not hereafter be allowed anything in the shape of commissions in his disbursements.

Proviso.

Compensation to superintendent not to exceed \$3,000.

Conneaut Creek, Ohio.

For improving the mouth of Conneaut creek, Ohio, seven thousand eight hundred dollars.

Ashtabula Creek, Ohio.

For completing the removal of obstructions at the mouth of Ashtabula creek, Ohio, three thousand eight hundred dollars.

Cunningham Creek, Ohio.

For a pier head at Cunningham creek, Ohio, one thousand five hundred dollars.

Grand River (Fairport Harbor), Ohio.

For completing the removal of obstructions at the mouth of Grand river, Ohio, two thousand six hundred dollars.

Cleveland Harbor, Ohio.

For completing the improvement of Cleveland harbour, Ohio, six thousand six hundred dollars.

Black River (Lorain Harbor), Ohio.

For removing a sand bar at the mouth of Black river, Ohio, eight thousand dollars.

Huron River, Ohio.

For removing obstructions at the mouth of Huron river, Ohio, one thousand five hundred dollars.

La Plaisance Bay, Mich.

For piers at La Plaisance bay, Michigan, eight thousand dollars.

For the improvement of the navigation of the Cumberland river, thirty thousand dollars, to be expended under the direction of the War Department. Cumberland River, Tenn.

For the removal of the obstructions to the navigation of the Savannah river, between the mouth thereof and the city of Savannah, the sum of twenty-five thousand dollars, including the balance of the former appropriation to the same object, to be expended according to a plan and an estimate of the Department of War. Savannah River, Ga.

For defraying the expenses incidental to making examinations and surveys under the act of thirtieth April, one thousand eight hundred and twenty-four, thirty thousand dollars. Surveys. Act Apr. 30, 1824, c. 46.

* * * * *

Approved, July 3, 1832.

CHAP. 164.—An Act To authorize the surveying and laying out a road from Detroit to the mouth of Grand River of Lake Michigan, in the Michigan Territory, and for the survey of canal routes in the Territory of Florida. July 4, 1832. Vol. 4, p. 560.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

SEC. 4. *And be it further enacted,* That the President of the United States be, and he is hereby, authorized to cause to be made, an accurate and minute survey of the country between the waters of St. Andrew's bay and the river and bay of Chattahoochie, and between Pensacola bay and Bon Secour, along the northern coast of the Gulf of Mexico, with a view to ascertain the practicability and cost of canals to connect said bays and rivers, with notes, plans, observations, and opinions, of the engineers on each of said parts designated, with estimates of the cost of each; and, for the purpose of carrying into effect the foregoing provisions, the sum of three thousand dollars be, and the same is hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated. Survey to ascertain practicability of canals to connect bays and rivers in Florida and Alabama. Estimates to be made. \$3,000 appropriated.

Approved, July 4, 1832.

CHAP. 301.—An Act Supplemental to the Act "granting certain relinquished and unappropriated lands to the State of Alabama, for the purpose of improving the navigation of the Tennessee, Coosa, Cahaba, and Black Warrior rivers," approved the twenty-third day of May, one thousand eight hundred and twenty-eight. July 16, 1832. Vol. 4, p. 604.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That it shall and may be lawful for the State of Alabama to alter the plan for the improvement on the Tennessee river below Florence, by canalling instead of sluicing, so as to accomplish the object which Congress had in view in State of Alabama authorized to alter plan of improvement. Act May 23, 1828, c. 75.

Proviso.

making the appropriation: *Provided*, That not more than one hundred and fifty thousand dollars, including the sum already expended on that part of the river, shall be expended below the said town of Florence.

Approved, July 16, 1832.

Mar. 2, 1833.

Vol. 4, p. 619.

CHAP. 54.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year one thousand eight hundred and thirty-three.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the treasury, viz:

* * * * *

Reappropriations
for improvement
of rivers in Florida
and Michigan.

For removing obstructions in the Savannah river, being part of the balance of an appropriation carried to the surplus fund, forty-three dollars six cents.

* * * * *

Approved, March 2, 1833.

Mar. 2, 1833.

Vol. 4, p. 645.

CHAP. 64.—An Act For improving the navigation of certain rivers in the Territories of Florida and Michigan, and for surveys, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That, for the purpose of removing obstructions, and improving the navigation of certain rivers in the territories of Florida and Michigan, the following sums be, and they are hereby, appropriated, to be paid out of any money in the Treasury; to be expended under the direction of the President of the United States.

Escambia River.

For removing obstructions in, and improving the navigation of, the Escambia river, five thousand dollars.

Ochlockonee River.

For improving the navigation of Ochlochney river, five thousand dollars.

Choctaw-hatchee River.

For improving the navigation of the Choctawhatchie river, as recommended by the Postmaster General, for the transportation of the mail from Pensacola to Tallahassee, five thousand dollars.

Chicago Harbor.

For improving the harbour at Chicago on lake Michigan, twenty-five thousand dollars.

Survey of White and St. Francis rivers.

For a survey of White and Saint Francis rivers, in the territory of Arkansas, five hundred dollars.

Approved, March 2, 1833.

CHAP. 66.—An Act To improve the navigation of the Potomac River between Georgetown and Alexandria, and for other purposes.

Mar. 2, 1833.
Vol. 4, p. 646.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That, in order to aid the citizens of Georgetown in removing the obstruction to their navigation, by causing the cut already made through the bar, below the town, to be enlarged and deepened; and for the further purpose of enabling them to make a free turnpike road to the district line on the Virginia side of the river, and to purchase of the present proprietors, and make forever free, the bridge over the Little Falls of Potomac river, the sum of one hundred and fifty thousand dollars be, and the same is hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated.

Appropriation to citizens of Georgetown, to improve navigation of Potomac, etc.

SEC. 2. *And be it further enacted,* That the said sum shall be paid, from time to time, by the Secretary of the Treasury, to the order of the corporation of Georgetown, in such sums as to enable the said corporation to effect the purposes aforesaid.

How to be paid.

SEC. 3. *And be it further enacted,* That before the said sum be paid over to the said corporation, it shall pass an ordinance to make said road and bridge free, and to be kept in repair by said corporation forever.

Condition.

Approved, March 2, 1833.

CHAP. 69.—An Act Making appropriations for carrying on certain works heretofore commenced for the improvement of harbours and rivers, and, also, for continuing and repairing the Cumberland road, and certain territorial roads.

Mar. 2, 1833.
Vol. 4, p. 648.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and the same are hereby, appropriated for carrying on or completing certain works and roads heretofore commenced, to be paid out of any money in the treasury not otherwise appropriated.

Appropriations.

For carrying on the Delaware breakwater, two hundred and seventy thousand dollars.

Delaware Breakwater.

For removing a sand bar at the mouth of Black river, Ohio, two thousand four hundred dollars.

Black River (Lorain Harbor).

For a pier head at Cunningham creek, Ohio, five hundred dollars.

Cunningham Creek.

For completing the removal of obstructions at the mouth of Ashtabula creek, Ohio, three thousand four hundred dollars.

Ashtabula Creek.

For completing the improvement of the harbour of Presque Isle, Pennsylvania, six thousand dollars.

Presque Isle (Erie) Harbor.

For completing the pier at the mouth of Buffalo harbour, New York, thirty-one thousand seven hundred dollars.

Buffalo Harbor.

For improving the entrance of Genesee river, New York, fifteen thousand dollars.

Genesee River (Charlotte Harbor).

Great Sodus Bay.	For removing obstructions at the mouth of Big Sodus bay, New York, fifteen thousand dollars.
Oswego.	For completing the pier and mole at Oswego, New York, eight thousand four hundred dollars.
Merrimack River.	For the completion of the breakwater at the mouth of the Merrimack river, four thousand nine hundred dollars.
Plymouth beach.	For repairing Plymouth beach, six hundred dollars.
Breakwater at Hyannis.	For the breakwater at Hyannis, Massachusetts, five thousand dollars.
Newcastle, Marcus Hook, and Port Penn.	For improving the harbours of New Castle, Marcus Hook, Chester, and Port Penn, in the Delaware, four thousand dollars.
Ocracoke Inlet.	For carrying on the improvement of Ocracoke inlet, North Carolina, sixteen thousand seven hundred dollars.
Cape Fear River.	For improving Cape Fear river, below Wilmington, North Carolina, twenty-eight thousand dollars.
Ohio, Missouri, and Mississippi rivers.	For improving the navigation of the Ohio, Missouri, and Mississippi rivers, fifty thousand dollars.
	* * * * *
St. Marks River.	For completing the improvement of St. Mark's river and harbour in Florida, in addition to the unexpended balance of former appropriations, one thousand five hundred dollars.
	* * * * *
Channel between St. Marys and St. Johns.	For completing the improvement of the inland channel between St. Mary's and St. John's, in Florida, nine thousand dollars.
Apalachicola Harbor and River.	For the completion of the removal of obstructions in the harbour and river Appalachicola, in Florida, according to the report and estimate of the engineer, Lieutenant Long, eight thousand seven hundred dollars, including the unexpended appropriation of last year.
	* * * * *
Examinations and surveys. 1824, c. 46.	For defraying the expenses incidental to making examinations and surveys under the act of the thirtieth of April, one thousand eight hundred and twenty-four, twenty-five thousand dollars.
	* * * * *

Approved, March 2, 1833.

Mar. 2, 1833.
Vol. 4, p. 663.

CHAP. 90.—An Act Further to extend the powers of the board of canal commissioners for the improvement of the Tennessee river in the state of Alabama.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the commissioners appointed by the state of Alabama to superintend the improvement of the Tennessee river, and their successors in office, be, and they are hereby authorized to suspend the improvement of so much of said river as is below Florence, in said State, and every other part of the same, until the canal and other improvements,

Commissioners authorized to suspend improvement of Tennessee River.

between Lamb's ferry and Campbell's ferry, shall have been completed; anything in the act entitled "An act to grant certain relinquished and unappropriated lands to the State of Alabama for the purpose of improving the navigation of the Tennessee, Coosa, Cahawba, and Black Warrior rivers," approved twenty-third of May, one thousand eight hundred and twenty-eight, to the contrary notwithstanding.

1828, c. 75.

Approved, March 2, 1833.

CHAP. 101.—An Act For the relief of Peter Bargy, junior, Stephen Norton, and Hiram Wolverton.

Mar. 2, 1833.
Vol. 6, p. 541.

Be it enacted by the Senate, and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury pay, out of any money in the treasury not otherwise appropriated, to Peter Bargy, junior, Stephen Norton, and Hiram Wolverton, the sum of eight thousand four hundred and thirty dollars and sixty-two cents, on account of the money and labor paid and bestowed by them in endeavoring to construct a dam across a part of the Savannah river, in the State of Georgia, under and by virtue of a contract made with a Commissioner of the United States to remove obstructions in the mouth of said river, according to the act of May

Payment for labor, etc., in constructing a dam across Savannah River below Savannah.

Act May 18,
1826, c. 73.

Approved, March 2, 1833.

III. RESOLUTION giving the right of way through the property of the United States at Harper's Ferry, to the Winchester and Potomac Railroad Company.

June 25, 1834.
Vol. 4, p. 744.

Resolved by the Senate and House of Representatives of the United States of America, in Congress assembled, That the President of the United States of America be, and he is hereby, authorized to convey to the Winchester and Potomac Railroad Company, free of charge, the right of way through the property held by the United States at Harper's Ferry, (and at present not improved,) if, in his opinion, it should not be inconsistent with the public service; and, also, on the same terms, so much of the ground between the arsenal and the Shenandoah river, and near its junction with the Potomac, as may be deemed consistent with the public interest: to be used for the benefit of the said company in the deposit and accommodation of the trade of said Winchester and Potomac Railroad Company only, and for no other purpose whatever: *Provided, nevertheless,* That the said railroad shall be so located, in the judgment of two or more skillfull engineers of the army of the United States, who may be deputed by the President of the United States to

Grant of right of way and restriction of its use.

Provided.

Not to impede or injure future improvement of navigation of Shenandoah River, etc.

make such location, as not to impede or injure, in any manner, the future improvement of the navigation of the river Shenandoah by a lock and dam navigation, or by extending a canal along the left bank thereof, to the river Potomac, or to the canal now constructed along the left bank of the said river.

Approved, June 25, 1834.

June 27, 1834.
Vol. 4, p. 689.

CHAP. 92.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year one thousand eight hundred and thirty-four.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the treasury, viz:

* * * * *

G. Trumbull,
Stonington.

For payment of balance due Gurdon Trumbull, superintendent of the public works at Stonington harbour, two hundred and sixty-two dollars sixteen cents.

P. H. Perrault,
St. Augustine.

For payment of Major P. H. Perrault, balance due on account of the survey of the harbour of St. Augustine, two dollars and eighty-four cents.

* * * * *

Approved, June 27, 1834.

June 28, 1834.
Vol. 4, p. 702.

CHAP. 103.—An Act Making additional appropriations for certain harbours, and removing obstructions in the mouths of certain rivers, for the year one thousand eight hundred and thirty-four.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the treasury, for carrying on and completing certain works heretofore commenced, viz:

Kennebunk
River.

For piers at the entrance of Kennebunk river, ten thousand three hundred dollars.

Merrimack
River.

For the breakwater at the mouth of Merrimack river, three thousand eight hundred and sixty dollars.

Plymouth
beach.

For the preservation of Plymouth beach, two thousand dollars.

Beach at Provincetown.

For the preservation of the beach at Provincetown harbour, Massachusetts, four thousand four hundred dollars.

Hyannis break-
water.

For the breakwater at Hyannis harbour, Massachusetts, ten thousand dollars.

Newcastle,
Marcus Hook, and
Port Penn.

For improving the harbours of Newcastle, Marcus Hook, Chester, and Port Penn, in the Delaware river, six thousand one hundred and thirty-three dollars.

Ocracoke Inlet.

For carrying on the improvements of Ocracoke inlet, North Carolina, fifteen thousand dollars.

For improving Cape Fear River below Wilmington, North Carolina, five thousand two hundred and thirty-four dollars. Cape Fear River.

For improving the navigation of the Ohio, Missouri, and Mississippi rivers, fifty thousand dollars. Ohio, Missouri, and Mississippi rivers.

For completing the improvement of St. Mark's river and harbour, Florida, four thousand six hundred dollars. St. Marks.

For improving the harbour of Chicago, Illinois, thirty-two thousand eight hundred and one dollars. Chicago Harbor.

For the piers at La Plaisance bay, Michigan, four thousand eight hundred and ninety-five dollars. La Plaisance piers.

For improving the navigation of Red river, fifty thousand dollars. Red River.

For carrying on the Delaware breakwater, two hundred and seventy thousand dollars. Delaware Breakwater.

For filling up and securing a breach in the south embankment at Presque Isle, Pennsylvania, three thousand and forty-five dollars. Presque Isle (Erie) Harbor.

For improving the harbour at Mobile, in removing the bar at the entrance of the harbour called Choctaw Pass, ten thousand dollars. Mobile Harbor.

For improving the navigation of the river Savannah, in removing the obstructions in said river from the city of Savannah to its mouth, thirty thousand dollars. Savannah River.

For continuing and securing the works at Oswego harbour, New York, thirty-thousand dollars. Oswego Harbor.

For continuing the improvements at Big Sodus bay, New York, on the present plan, fifteen thousand dollars. Great Sodus Bay.

For completing the works at Genessee River, New York, on the present plan, twenty thousand dollars. Genessee River (Charlotte Harbor).

For continuing the improvements of Black Rock harbour, New York, twelve thousand dollars. Black Rock Harbor.

For completing the works at Buffalo, New York, twenty thousand dollars. Buffalo.

For continuing the improvements at Dunkirk harbour, New York, four thousand dollars. Dunkirk.

For securing the works at Presque Isle, Pennsylvania, twenty thousand dollars. Presque Isle (Erie) Harbor.

For completing and securing the works at Cleveland harbour, Ohio, thirteen thousand three hundred and fifty thousand dollars. Cleveland Harbor.

For repairing and securing the works at Grand river, Ohio, ten thousand dollars. Grand River (Fairport Harbor).

For securing the works at Black river, Ohio, five thousand dollars. Black River (Lorain Harbor).

For extending and securing the works at Huron river, Ohio, six thousand seven hundred dollars. Huron River.

For continuing the improvements at Ashtabula creek, Ohio, five thousand dollars. Ashtabula Creek.

And for defraying the expense of surveys pursuant to the act of the thirtieth of April, eighteen hundred and twenty-four, including arrearages for eighteen hundred and thirty-three, twenty-nine thousand dollars, of which Surveys under act of Apr. 30, 1824, etc., c. 46.

sum five thousand dollars shall be appropriated and applied to geological and mineralogical survey and researches.

* * * * *

Cumberland River.

For the continuation of the improvement of the navigation of the Cumberland river, thirty thousand dollars, to be expended under the direction of the War Department.

Approved, June 28, 1834.

June 30, 1834.
Vol. 4. p. 716.

CHAP. 137.—An Act Authorizing the selection of certain Wabash and Erie Canal lands in the State of Ohio.

Commissioners to select lands, Wabash and Erie Canal.

1827, c. 56; 1841, c. 12; 1845, c. 42.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That, in lieu of the lands sold or otherwise disposed of by the United States, within the state of Ohio, and which would otherwise become the property of the state of Indiana, in virtue of "An act to grant a certain quantity of land to the state of Indiana for the purpose of aiding said state in opening a canal to connect the waters of the Wabash river with those of Lake Erie," approved March second, eighteen hundred and twenty-seven, the canal commissioners authorized to locate the lands granted as aforesaid for the use of the canal within the state of Ohio, be, and they are hereby, authorized to select an equal quantity from the alternate sections which would otherwise belong to the United States in the division under said act, or from the lands recently acquired by the purchase from the Indians, or from other lands in the neighbourhood near the line of said canal as they shall think proper; and the lands thus selected shall be vested and disposed of for the use of the canal as other lands appropriated by the act aforesaid.

Former selections, if sold, to be paid for to commissioners.
Act Mar. 2, 1827, c. 56.

SEC. 2. *And be it further enacted,* That in case of selections of lands authorized by the previous section, and which agreeably to treaty stipulations may hereafter be sold by the United States for the benefit of the Indians, a sum equal to the amount for which said lands may have been sold, shall be paid over, by the Treasurer of the United States, to the commissioners authorized to receive the same, for the use and benefit of said canal.

Lands reserved from sale until selections made.

SEC. 3. *And be it further enacted,* That until the lands granted by the aforesaid act of March second, eighteen hundred and twenty-seven, shall be selected and the selections contemplated by this act shall be made, the public lands on and near the line of said canal, and liable to the selections aforesaid, shall be reserved from sale.

* Commissioners to be furnished maps,

SEC. 4. *And be it further enacted,* That it shall be the duty of the commissioner of the general land office to furnish said commissioners with a perfect map of the surveyed lands on and contiguous to the Maumee river, within the state of Ohio, including the lands recently purchased from the Indians, carefully noting thereon the lands which have been sold or otherwise disposed of by the United States.

Approved, June 30, 1834.

CHAP. 148.—An Act Authorizing a road to be cut out from the northern boundary of the territory of Florida, by Marianna, to the town of Appalachicola, within the said territory. June 30, 1834.
Vol. 4, p. 723.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, * * **

* * * * *

For a survey of the east pass into Appalachicola bay and river, to ascertain the practicability and cost of removing obstructions and improving the harbour, five hundred dollars. Survey of East Pass into Appalachicola Bay.

Approved, June 30, 1834.

CHAP. 150.—An Act Making an appropriation for the improvement of the navigation of the Hudson River, in the State of New York. June 30, 1834.
Vol. 4, p. 724.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the sum of seventy thousand dollars be, and the same is hereby, appropriated towards the improvement of the navigation of the Hudson river, and the removal of obstructions therein, according to the plan submitted to the House of Representatives by the Department of War, under date of March thirty, eighteen hundred and thirty-two; which sum shall be paid out of any money in the Treasury not otherwise appropriated, and shall be expended under the direction of the President of the United States. Appropriation for improvement of Hudson River.

Approved, June 30, 1834.

CHAP. 209.—An Act For the relief of John Bruce. June 30, 1834.
Vol. 6, p. 588.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury pay, out of any money in the treasury not otherwise appropriated, to John Bruce, six thousand two hundred and forty dollars and sixty-three cents, on the report of General Charles Gratiot, for damages actually sustained by the said John Bruce, by the suspension of his contract to clear out the Ohio and Mississippi rivers, in payment made to his workmen, for their hire, and for damages, and for boarding them when out of employ, and for damages he sustained by the neglect on the part of the United States to furnish a sufficient number of superintendents to inspect the work to have been done. Payment for damages sustained under contract to clear out Ohio and Mississippi rivers, etc.

Approved, June 30, 1834.

Feb. 24, 1835.
Vol. 4, p. 752.

CHAP. 21.—An Act For improving the harbour at the mouth of the River Raisin, in the Territory of Michigan.

Appropriations
for new entrance
into harbor (of
Monroe) at
mouth of River
Raisin.

Proviso.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the sum of thirty thousand dollars be, and the same is hereby, appropriated out of any money in the treasury not otherwise appropriated, for the construction of a new entrance into the harbour, at or near the mouth of the river Raisin, where it unites with lake Erie, according to a plan and survey of the said works, made under the direction of the War Department by Capt. H. Smith, during the fall of the year eighteen hundred and thirty-four; *Provided, however,* That no part of the sum hereby appropriated shall be expended for improving the channel of said river, but the expenditure hereby directed, shall be confined exclusively to the construction of a cut or passage from the lake to that part of the river which is to be used as a harbour for vessels.

Approved, February 24, 1835.

Feb. 24, 1835.
Vol. 4, p. 752.

CHAP. 22.—An Act For the completion of certain improvements in Florida.

For clearing
out Oklawaha
River.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That for the purpose of executing certain internal improvements, hereinafter designated, in the territory of Florida, the following sums be, and the same are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated:

For clearing out the Ochlawaha river from the St. John's to Glassall's Spring, near Camp King, for the transportation of provisions and military stores to the garrison at that place, as estimated in the report of the Quartermaster General, ten thousand dollars:

* * * * *

For improving
navigation of
Chattahoochee.

For continuing the improvement of the navigation of Chatahawchie river from Cedar Bluff to the Big Spring, in Florida, according to the report of the assistant quartermaster charged with the superintendence of the removal of obstructions, two thousand dollars.

Removing ob-
structions in Chi-
pola River.

For removing obstructions in the Chipola river, in Florida, five thousand dollars.

Approved, February 24, 1835.

Mar. 3, 1835.
Vol. 4, p. 753.

CHAP. 26.—An Act Making additional appropriations for the Delaware Breakwater, and for certain harbours, and removing obstructions in and at the mouths of certain rivers, for the year one thousand eight hundred and thirty-five.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums be, and the same are hereby, appropri-

ated, to be paid out of any money in the treasury, not otherwise appropriated, for carrying on and completing certain works heretofore commenced, viz:

For improving the harbour of Chicago, in addition to the balance of former appropriations, thirty-two thousand eight hundred dollars. Chicago Harbor.

For securing the works at Black river, four thousand four hundred dollars. Black River (Lorain Harbor), Ohio.

For continuing the improvement at Ashtabula creek, in addition to the balance of former appropriations, seven thousand five hundred and ninety-one dollars. Ashtabula Creek.

For securing the works at Presqu' Isle in addition to the balance of former appropriations, five thousand dollars. Presque Isle (Erie) Harbor.

For completing the works at Genesee river, two thousand three hundred and ninety dollars. Genesee River (Charlotte Harbor).

For continuing the improvement of Big Sodus bay, eleven thousand seven hundred and ninety dollars. Great Sodus Bay.

For the preservation of the beach at Provincetown harbour, in addition to the balance of former appropriation, four thousand four hundred dollars. Provincetown Harbor.

For the preservation of Plymouth beach, seven hundred dollars. Plymouth beach.

For the breakwater at Hyannis harbour, in addition to the balance of former appropriation, nine thousand dollars. Hyannis Harbor.

For improving the harbours of New Castle, Marcus Hook, Chester, and Port Penn, in the Delaware river, in addition to the balance of former appropriation, six thousand dollars. Harbors in the Delaware.

For improving the navigation of the Savannah River, in removing the obstructions in said river from the city of Savannah to its mouth, in addition to the balance of former appropriations, twenty thousand dollars. Savannah River.

For improving the navigation of the Ohio river below the falls, and the Missouri and Mississippi rivers, fifty thousand dollars. Ohio, Missouri, and Mississippi rivers.

For the improvement of the navigation of the Ohio river, between Pittsburg and the falls of the Ohio, fifty thousand dollars, to be expended under the direction of the War Department, and under the care of a superintendent for that part of the Ohio. Ohio River, between Pittsburg and the Falls. 1836, c. 259.

For the Delaware breakwater, one hundred thousand dollars, *Provided*, That only so much of this sum shall be applied as, in the opinion of the Secretary of War, may be advantageously expended in the present situation of the said work. Delaware Breakwater. *Proviso.*

For completing the improvement at the harbour of Mobile, in removing the bar at the entrance of the harbour, called the Choctaw Pass, in addition to the appropriation of ten thousand dollars, made at the last session, seventeen thousand nine hundred and ninety-seven dollars and sixty cents. Mobile Harbor.

- Red River.** For completing the removal of the obstructions to the navigation of Red river, in addition to the appropriation of fifty thousand dollars, made at the last session of Congress, the sum of fifty thousand dollars.
- Arkansas River, and an iron boat.** For improving the navigation of the Arkansas river, and for constructing a boat with an iron hull, forty thousand dollars.
- Cape Fear River.** For completing the improvement in the navigation of the Cape Fear river, below the town of Wilmington, North Carolina, twenty thousand dollars.
- Dredging machine, etc., for Florida.** For constructing a dredging machine, and for completing the inland channel between St. Mary's and St. John's, in the territory of Florida, according to the estimate of the engineer department, fifteen thousand dollars.
- Dunkirk Harbor, N. Y.** For filling up with stone, three hundred and fifty-two yards of the outer pier or breakwater at Dunkirk harbour, New York, one thousand four hundred and eighteen dollars and twenty-seven cents.
- Extending pier at said harbor.** For extending and completing the pier or breakwater in front of said harbour, nine thousand five hundred and seventy dollars and sixteen cents.
- Provido.* *Provided,* That no officer of the army shall receive any per cent. or additional pay, extra allowance, or compensation, in any form whatever, on account of the disbursing any public money appropriated by law during the present session, for fortifications, execution of surveys, works of internal improvement, building of arsenals, purchase of public supplies of any description, or for any other service or duty whatsoever, unless authorized by law.

Approved, March 3, 1835.

Mar. 3, 1835.
Vol. 4, p. 777.

CHAP. 41.—An Act Making appropriations for certain roads, and for examinations and surveys, for the year one thousand eight hundred and thirty-five.

Appropriations. *Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,* That the following sums be, and they are hereby, appropriated, to be paid out of any unappropriated money in the treasury, for certain roads, and for making examinations and surveys, for the year one thousand eight hundred and thirty-five, viz:

Examinations and surveys.
1824, c. 46.

* * * * *

For defraying the expenses incidental to making examinations and surveys under the act of thirtieth of April, eighteen hundred and twenty-four, twenty-five thousand dollars.

* * * * *

Approved, March 3, 1835.

CHAP. 119.—An Act To amend an Act to grant certain relinquished and unappropriated lands to the State of Alabama, for the purpose of improving the navigation of the Tennessee, Coosa, Cahaba and Black Warrior River.

June 23, 1836.

Vol. 5, p. 57.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the second section of the act above recited as restricts the State of Alabama from having the power to sell, dispose of, or grant the residue of the lands granted by the act to which this is a supplement, at a price not less than the minimum price of the public lands, be, and the same is hereby repealed.

Part of former act repealed.

Act May 23, 1828, c. 75.

SEC. 2. *And be it further enacted, That* the assent of the United States is hereby given, to any act which the Legislature of the State of Alabama may pass for imposing a toll on the use of such parts of the canal or canals, which have been or may be, constructed at or around the Muscle and Colbert's shoals of the river Tennessee: *Provided, That* such tolls shall be expended exclusively on the said canals, and shall not exceed in amount, the sum required to keep them in repair, and to defray the expenses of lock tenders, collectors, superintendents, and managers; and that no part of this act, shall be construed as a repeal of the exemption, contained in the seventh section of the aforesaid act, of the property of the United States, and all persons in their service, from any toll whatever: *And provided further, That* an annual report shall be made to the Secretary of the Treasury of the United States, of the rate and amount of tolls charged or collected on said canals, and their application.

State of Alabama may impose tolls on canals, etc.

Proviso.

Proviso.

Approved, June 23, 1836.

CHAP. 138.—An Act For the relief of George Bender.

June 23, 1836.

Vol. 6, p. 642.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of War settle and adjust the claim of George Bender, late a major in the army of the United States, and allow him the same pay and emolument that a major of engineers would have received, (if discharging the same duties,) for the time he was actually superintending the construction of the Delaware breakwater, under orders from the Quartermaster-General: and that the sum so found his due be paid out of any money in the treasury not otherwise appropriated.

Allowed pay of major of engineers while superintending construction of Delaware Breakwater.

Approved, June 23, 1836.

CHAP. 259.—An Act Making additional appropriations for the Delaware Breakwater, and for certain harbors, and removing obstructions in and at the mouths of certain rivers, and for other purposes, for the year one thousand eight hundred and thirty-six.

July 2, 1836.

Vol. 5, p. 67.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appro-

priated, to be paid out of any money in the Treasury not otherwise appropriated, for carrying on and completing certain works heretofore commenced, viz:

- Delaware Breakwater. For continuing the Delaware breakwater, one hundred thousand dollars.
- Chicago, Ill. For continuing the improvement of the harbor of Chicago, Illinois, thirty-two thousand dollars.
- Great Sodus Bay. For continuing the improvement of Big Sodus bay, twelve thousand six hundred dollars.
- Provincetown, Mass. For the continuation of the works for the preservation of the beach at Provincetown harbor, Massachusetts, four thousand four hundred dollars.
- Plymouth beach. For the continuation of the works for the preservation of Plymouth beach, Massachusetts, five hundred dollars.
- Mouth of River Raisin (Monroe Harbor). For the continuation of the works at the harbor near the mouth of the river Raisin, Michigan Territory, fifteen thousand dollars.
- Black River (Lorain Harbor). For continuing the removal of obstructions at Black river, Ohio, six thousand six hundred and sixty dollars.
- Cleveland Harbor. For continuing the permanent improvement of Cleveland harbor, Ohio, fifteen thousand dollars.
- Grand River (Fairport Harbor). For continuing the removal of obstructions at Grand river, Ohio, six thousand dollars.
- Cunningham Creek. For continuing the removal of obstructions at Cunningham creek, Ohio, one thousand two hundred and seventy-five dollars.
- Conneaut Creek. For continuing the removal of obstructions at Conneaut creek, Ohio, two thousand five hundred dollars.
- Presque Isle (Erie) Harbor. For continuing the improvement of the harbor of Presque Isle, Pennsylvania, according to Colonel Totten's recommendation, fifteen thousand dollars.
- Dunkirk, N. Y. For continuing the improvement at Dunkirk harbor, New York, eleven thousand dollars.
- Dredging machine on Lake Erie. For a dredging machine on Lake Erie, eight thousand dollars.
- Genesee River (Charlotte Harbor). For continuing the works at the mouth of Genesee river, New York, twenty thousand dollars.
- Oswego Harbor. For continuing the pier and mole at Oswego harbor, New York, twenty thousand dollars.
- Kennebunk. For continuing the pier at Kennebunk, Maine, seven thousand five hundred dollars.
- Hudson River. For continuing the improvement of the navigation of the Hudson river, above and below Albany, in the State of New York, one hundred thousand dollars, to be expended according to the plan and estimate recommended by the Secretary of War.
- Newcastle, Del. For continuing the improvement of the harbor of New Castle, Delaware, twenty-five thousand dollars.
- Ocracoke Inlet. For continuing the removal of obstructions at Ocracoke inlet, North Carolina, nine thousand dollars.
- Cape Fear River. For continuing the improvement of the navigation of the Cape Fear river, below Wilmington, North Carolina, twenty thousand dollars.

For the improvement of the navigation of the Ohio river, between Pittsburg and the falls of the Ohio, twenty thousand dollars, which, together with the unexpended balance of the appropriation for this purpose by the act of the third of March, A. D. eighteen hundred and thirty-five, shall be expended by direction of the Secretary of War, under the superintendence of the officers of the engineer corps heretofore employed on that service.

Ohio River.

1835, c. 25.

For the improvement of the navigation of the Ohio and Mississippi rivers from Louisville to New Orleans, sixty thousand dollars.

Ohio and Mississippi rivers.

For the improvement of the Mississippi river above the mouth of the Ohio river, and for the Missouri river, forty thousand dollars, to be expended in such manner and for the removal of such obstructions as the Secretary of War shall direct.

Mississippi and Missouri rivers.

For continuing the removal of obstructions in Red river, Louisiana, and Territory of Arkansas, forty thousand eight hundred dollars.

Red River.

For constructing a boat to prevent a new accumulation of obstruction in said river, within the old limits of the Great Raft, so called, fifteen thousand dollars, and the additional sum of fifteen thousand dollars to work and support the same.

Boat and working it.

For continuing the improvement of the Cumberland river, in Kentucky and Tennessee, twenty thousand dollars.

Cumberland River, Ky.

For continuing the removal of obstructions in the Chipola river, in the Territory of Florida, four thousand dollars.

Chipola River, Fla.

For completing the inland channel between St. Mary's and St. John's, in the Territory of Florida, in addition to unexpended appropriations, according to the estimate of the Engineer Department, five thousand dollars.

Channel between St. Mary's and St. Johns.

For continuing the removal of obstructions in, and improving the navigation of, the Escambia river, in the Territory of Florida, five thousand five hundred dollars.

Escambia River.

For further improvements at the mouth of Huron river, in the State of Ohio, four thousand three hundred dollars.

Huron River.

And the following sums, necessary to close accounts, in the office of the Third Auditor, viz.

To close accounts in Third Auditor's office.

For removing obstructions at Cunningham creek, Ohio, thirty-two dollars and thirty-six cents.

Cunningham Creek.

For completing the pier at La Plaisance Bay, Michigan Territory, three hundred and twenty-three dollars and fifteen cents.

La Plaisance Bay, Mich.

For removing obstructions at Cleveland harbor, Ohio, six dollars and fifty-nine cents.

Cleveland Harbor.

For repairing breach in the peninsula at Presque Isle, one hundred and twenty-two dollars and eighty cents.

Presque Isle (Erie) Harbor.

* * * * *

For improvement of the navigation of the Ohio and Mississippi rivers from Pittsburg to New Orleans, under the act of second of March, eighteen hundred and thirty-one, seventeen thousand eight hundred dollars and five cents.

Ohio and Mississippi rivers.
1831, c. 58.

Examinations
and surveys.
1824, c. 46.

For defraying the expenses incidental to making examinations and surveys, under the act of the thirtieth of April, eighteen hundred and twenty-four, of which sum five thousand dollars shall be appropriated and applied to geological and mineralogical surveys and researches in the Indian country on the public lands and in the Territories of the United States, thirty thousand dollars.

Approved, July 2, 1836.

July 4, 1836.
Vol. 5, p. 128.

CHAP. 363.—An Act Making appropriations for the improvement of certain harbors therein mentioned, for the year one thousand eight hundred and thirty-six, and for other purposes.

Be it enacted, by the Senate and House of Representatives of the United States of America in Congress assembled, That for the security of the navigation and commerce of the United States, the following sums of money be, and the same are hereby directed to be paid out of any money in the Treasury not otherwise appropriated, and placed at the disposition of the President, for the following objects, viz:

Breakwater in
Portland Harbor,
Me.

For erecting a breakwater on Stanford ledge, in Portland harbor, according to the plan reported by John Anderson, of the Engineer corps, in the year eighteen hundred and thirty-two, ten thousand dollars.

Survey near
Owls Head Har-
bor, Me.

For the survey of a ledge near Owl's-head harbour, to determine the expediency of erecting thereon a breakwater to improve said harbor, four hundred dollars.

Survey at Cobs-
cook Bay, Me.

For the examination and survey of the passage into Cobscook bay, in the State of Maine, for the purpose of ascertaining the practicability of removing two ledges whereby the navigation of said bay is materially obstructed, three hundred dollars.

Deepening Co-
checo River, N.H.

For deepening the channel of the Cocheco branch of the Piscataqua river, leading into Dover harbour, five thousand dollars.

Harbor of Bass
River, Mass.

For the improvement of the harbor at the mouth of Bass river, ten thousand dollars and forty-one cents.

Removing
wreck in New
Bedford Harbor,
Mass.

For removing the wreck in the harbor of New Bedford, ten thousand dollars.

Breakwater at
Sandy Bay
(Rockport Har-
bor), Mass.

For the construction of a breakwater at Sandy bay, agreeably to the report of a survey made by the direction of the Department of War, transmitted to Congress by the President, April twenty-third, eighteen hundred and thirty, ten thousand dollars.

Point of land in
Duxbury, Mass.

For preserving the point of land leading to the fort and light-house at the Gurnet, in Duxbury, by hurdles or double ranges of piles, five thousand dollars.

Rainsford Is-
land, Mass.

For the preservation of Rainsford island, in the harbor of Boston, fifteen thousand dollars.

Breakwater at
Churchs Cove
Harbor, R. I.

For a breakwater at Church's Cove ^[a] harbor, in the town of Little Compton, ten thousand dollars, agreeably

^a This cove has sometimes been called Fishing Place Cove; it is known also as Sakonnet Point Harbor.

to a survey made by Lieutenant-Colonel Anderson, of the United States topographical engineers, in eighteen hundred and twenty-seven.

For improving the harbor of Saybrook, by removing the bar at the mouth of Connecticut river, twenty thousand dollars. Saybrook Harbor, Conn.

For improving the harbor of Westport, agreeably to the report of John Anderson, of the Engineer corps, three thousand dollars. Westport Harbor, Conn.

For a sea-wall to preserve Fairweather [Fayerweather] island, near Black Rock harbor, ten thousand dollars. Fayerweather Island, Conn.

For securing the public works at the harbor of Southport, one thousand five hundred dollars. Southport, Conn.

For further securing the beach at Cedar point, in Connecticut, one thousand dollars. Cedar Point, Saugatuck River, Conn.

For deepening the channel leading into Bridgeport harbor, ten thousand dollars. Bridgeport Harbor, Conn.

For deepening the channel of the river Thames, leading into Norwich harbor, ten thousand dollars. Norwich Harbor, Conn.

For building a breakwater or pier at the harbor of Burlington, ten thousand dollars. Breakwater, Burlington Harbor, Vt.

For deepening the channel to eight feet between the islands of North and South Hero, near Saint Alban's in Lake Champlain, in Vermont, fifteen thousand dollars. Channel near St. Albans, Vt.

For the improvement of the harbor of Portland, on Lake Erie, ten thousand dollars. Portland Harbor, Lake Erie, N. Y.

For the improvement of the harbor at the mouth of Salmon river ^[a], on Lake Ontario, according to the several plans of said harbor, submitted through the Department of War, five thousand dollars. Salmon River, (Port Ontario Harbor), N. Y.

For the improvement of the harbor at the mouth of Oak Orchard creek, on Lake Ontario, according to the plan thereof made by Joseph G. Swift, civil engineer, five thousand dollars. Oak Orchard Creek, Lake Ontario, N. Y.

For the improvement of the harbor at the mouth of Black river, in the county of Jefferson, five thousand dollars. Black River, N. Y.

For building a breakwater or pier at the harbor of Plattsburg, ten thousand dollars. Breakwater at Plattsburg, N. Y.

For improving the harbor at the mouth of Cattaraugus creek, on Lake Erie, fifteen thousand dollars. Cattaraugus Creek, Lake Erie, N. Y.

For improving the entrance of Whitehall harbor, on Lake Champlain, eight thousand dollars. Whitehall Harbor, N. Y.

For building an ice-breaker on Staten island, nineteen thousand five hundred dollars. Ice breaker, Staten Island, N. Y.

For improving the harbor at New Brunswick, by removing the obstructions in the Raritan river, according to a plan reported to the War Department by Hartman Bache, seven thousand dollars. New Brunswick Harbor, N. J.

For the protection and improvement of Little Egg harbor, according to the plan reported to the War Department, five thousand dollars. Little Egg Harbor, N. J.

^a Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

Survey of Crow shoal, N. J.

For a survey of Crow Shoal in Delaware bay, to ascertain the expediency of constructing a breakwater or artificial harbor, one thousand dollars.

Chester Harbor, Pa.

For repairs at the harbor of Chester, three thousand dollars.

Delaware River, near Fort Mifflin, Pa.

For removing the bar on the river Delaware, in the neighborhood of Fort Mifflin, with the view of improving the harbor of Philadelphia, fifteen thousand dollars.

Wilmington Harbor, Del.

For improving the harbor of Wilmington, by removing the bar at the mouth of Christiana river, according to the plan recommended by Hartman Bache, of the engineer corps, fifteen thousand dollars.

Baltimore Harbor, Md.

For deepening the harbor of Baltimore, twenty thousand dollars.

Survey on Chesapeake Bay, Md.

For a survey of the head waters of Chesapeake bay, pursuant to a resolution of the Legislature of Maryland, five hundred dollars.

Survey of James River, Va.

For a survey of James river, with the view of improving the harbor of Richmond, five hundred dollars.

Channels of Dismal Swamp Canal, Va.

For improving the navigation of the natural channels at the northern and southern entrances of the Dismal Swamp canal, fifteen thousand dollars.

Shoal in Pamlico River, N. C.

For removing a sand shoal in Pamlico river, five thousand dollars, by means of the dredging machine now in operation at Ocracock inlet.

Shoal in New River, N. C.

For removing the oyster shoal in New river, Onslow county, by means of the dredging machine now in operation in the collection district of Wilmington, five thousand dollars.

Beaufort Harbor, N. C.

To improve the harbor of Beaufort, five thousand dollars.

Georgetown Harbor, S. C.

For a survey of the bar and harbor at Georgetown, one thousand dollars.

Removing Brunswick bar, Ga.

For the removal of the Brunswick bar, with the view of improving the harbor of Brunswick, ten thousand dollars.

Mouth of Vermilion River, Ohio.

For constructing two piers and improving the navigation at the mouth of Vermilion river, ten thousand dollars, according to the plan reported to the War Department.

Michigan City Harbor, Ind.

For the construction of a harbor at Michigan city, according to the plan reported to the War Department, twenty thousand dollars.

Mouth of Mississippi River, La.

For increasing the depth of water in the mouth of the Mississippi river, by closing some of the passages leading out of it, or by cutting a ship channel, or by any other means which shall be deemed expedient by the Secretary of War, with the approbation of the President of the United States, seventy-five thousand dollars; the said sum to be expended in whole or in part, as may be thought proper by the War Department, after the necessary survey shall have been made.

Pier near St. Louis, Mo.

For a pier to give direction to the current of the Mississippi river, near the city of St. Louis, fifteen thousand dollars.

For the survey of Saint Francis, Black, and White rivers, in Arkansas and Missouri, to determine upon the expediency of removing the natural rafts thereon, one thousand dollars.

Survey of rivers in Arkansas and Missouri.

For removing a mud shoal, called the Bulk Head, in the channel from East Pass to Appalachicola, ten thousand dollars.

Removing Bulkhead shoal, Fla.

For the construction of a pier or breakwater at the mouth of the river Saint Joseph, twenty thousand dollars.

Mouth of St. Joseph River, Mich.

For the survey of the mouth of Milwaukee river, on Lake Michigan, to determine the practicability of making a harbor by deepening the channel, four hundred dollars.

Survey of Milwaukee River, Wis.

SEC. 2. *And be it further enacted*, That the reports upon all the aforesaid surveys shall contain a statement of all such facts within the knowledge of the engineers respectively making the surveys, as are or may be in any way materially connected with the proposed improvements, and also with estimates, in detail, of the sums of money necessary for such improvements, respectively.

Reports upon surveys to contain estimates, etc.

Approved, July 4, 1836.

CHAP. 44.—An Act To provide for certain harbors, and for the removal of obstructions in and at the mouths of certain rivers, and for other purposes, during the year one thousand eight hundred and thirty-seven.

Mar. 3, 1837.
Vol. 5, p. 187.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for carrying on and completing certain works heretofore commenced, to wit:

Appropriations for carrying on certain works.

For continuing the improvement of the harbor of Chicago, Illinois, forty thousand dollars;

Chicago Harbor.

For continuing the construction of a harbor at Michigan City, Indiana, thirty thousand dollars;

Michigan City.

For continuing the construction of a pier or breakwater at the mouth of the river Saint Joseph, Michigan, fifteen thousand dollars;

St. Joseph River.

For the continuation of the works at the harbor near the mouth of the river Raisin, Michigan, thirty thousand dollars;

River Raisin (Monroe Harbor).

For completing the channel of the Cocheco branch of the Piscataqua river, in the State of New Hampshire, five thousand dollars;

Cocheco River.

For continuing the improvement of the harbor at the mouth of Black river, in Jefferson county, State of New York, ten thousand dollars;

Black River.

For continuing the improvement of the harbor at Whitehall, in the State of New York, ten thousand dollars;

Whitehall Harbor.

For continuing the improvement of the channel at the mouth of Genesee river, in the State of New York, ten thousand dollars;

Genesee River (Charlotte Harbor).

Mobile Harbor.	For improving the harbor of Mobile, in the State of Alabama, by removing the bar of the Choctaw pass and Dog river bar, fifty thousand dollars;
Black River (Lorain Harbor).	For continuing the removal of obstructions at Black river, Ohio, six thousand four hundred and ten dollars;
Huron River.	For continuing the removal of obstructions at the mouth of the Huron river, in Ohio, two thousand five hundred and sixty-five dollars;
Vermillion River.	For continuing the improvement of the navigation at the mouth of Vermillion river, Ohio, twenty thousand dollars;
Cleveland Har- bor.	For continuing the improvement of Cleveland harbor, Ohio, ten thousand dollars;
Cunningham Creek.	For continuing the removal of obstructions at Cuning- ham creek, Ohio, five thousand dollars;
Ashtabula Creek.	For continuing the removal of obstructions at Ashta- bula creek, Ohio, eight thousand dollars;
Conneaut Creek.	For continuing the removal of obstructions at Conneaut creek, Ohio, five thousand dollars;
Presque Isle (Erie) Harbor.	For continuing the improvement of the harbor of Presque Isle, Pennsylvania, fifteen thousand dollars;
Dunkirk Har- bor.	For continuing the improvement of Dunkirk harbor, New York, fifteen thousand dollars;
Portland Har- bor.	For continuing the improvement of the harbor of Port- land, Lake Erie, New York, ten thousand dollars;
Cattaraugus Creek Harbor.	For continuing the improvement of the harbor at Catta- raugus creek, Lake Erie, New York, ten thousand dollars;
Salmon River (Port Ontario Harbor).	For continuing the improvement of the harbor of Salmon river ^a , Lake Ontario, New York, ten thousand dollars;
North and South Hero isl- ands.	For continuing the improvement of the channel between the North and South Hero islands, Lake Champlain, Ver- mont, six thousand dollars;
Plattsburg.	For continuing the construction of a breakwater at Plattsburg, New York, ten thousand dollars;
Oak Orchard Creek.	For continuing the improvement of the harbor at the mouth of Oak Orchard creek, New York, five thousand dollars;
Kennebunk.	For continuing the pier at Kennebunk, Maine, three thousand dollars;
Great Sodus Bay.	For continuing the improvement at Big Sodus bay, New York, twelve thousand dollars.
Oswego Har- bor.	For continuing the pier and mole at Oswego harbor, New York, fifteen thousand dollars;
	* * * * *
Burlington.	For continuing the construction of a breakwater at Bur- lington, Vermont, ten thousand dollars;
Stanfords ledge.	For continuing the breakwater on Stanford's Ledge, Portland harbor, Maine, twenty-five thousand dollars;
Sandy Bay (Rockport Har- bor).	For continuing the breakwater at Sandy bay, Massachu- setts, twenty thousand dollars;
Hyannis Har- bor.	For continuing the breakwater at Hyannis harbor, Mas- sachusetts, five thousand dollars;

^a Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

For continuing the improvement of the channel of the river Thames, leading into Norwich harbor, Connecticut, twenty thousand dollars; River Thames.

For continuing the securing of the public works, at the harbor of Southport, Connecticut, one thousand dollars; Southport Harbor.

For improving the harbor of Westport, Connecticut, three thousand seven hundred and thirty-four dollars; Westport Harbor.

For continuing the improvement of the navigation of the Hudson river, above and below Albany, in the State of New York, one hundred thousand dollars; to be expended according to the plan and estimate recommended by the Secretary of War; Hudson River.

For continuing the repairs at the harbor of Chester, Pennsylvania, two thousand dollars; Chester Harbor.

For continuing the improvement of the harbor of Wilmington, Delaware, eight thousand dollars; Wilmington Harbor.

For continuing the improvement of the harbor of Newcastle, Delaware, ten thousand dollars; Newcastle Harbor.

For continuing the Delaware breakwater, and constructing a wharf or mole pursuant to the report of Captain Delafield, one hundred and forty-one thousand dollars. Delaware Breakwater.

* * * * *

For continuing the improvement of the harbor of Baltimore, Maryland, fifteen thousand dollars; Baltimore Harbor.

For continuing the removal of obstructions at Ocracoke inlet, North Carolina, twelve thousand and fifty dollars; Ocracoke Inlet.

For continuing the improvement of the navigation of Cape Fear river, below Wilmington, North Carolina, ten thousand dollars; Cape Fear River.

For opening a passage, of fifty yards wide and seven feet deep, at low water, between the town of Beaufort and Pamlico sound, North Carolina, and for improving New river, in addition to two sums of five thousand dollars each, appropriated at the last session of Congress for the harbor of Beaufort and for New river, twenty thousand dollars; Opening passage between town of Beaufort and Pamlico Sound, and improving New River.

For continuing the improvements of the inland channel between Saint Mary's and Saint John's, Florida, five thousand dollars; Channel between St. Marys and St. Johns.

For continuing the improvement of the Cumberland river in Kentucky and Tennessee, according to the report of Colonel Abert, United States Engineer, dated February twenty-third, eighteen hundred and thirty-five, of the survey of said river, fifty-five thousand dollars; Cumberland River.

For continuing the removal of obstructions in the Red river, sixty-five thousand dollars; Red River.

For continuing the improvement of the Ohio river between the falls and Pittsburg, sixty thousand dollars; Ohio River.

For continuing the improvement of the navigation of the Ohio and Mississippi rivers, from Louisville to New Orleans, sixty thousand dollars; Ohio and Mississippi rivers.

For continuing the works for the removal of the obstructions to the navigation of the Mississippi river at its mouth, two hundred and ten thousand dollars; Mississippi River.

Arkansas River.

For continuing the works for the removal of the obstructions to the navigation of the Arkansas river, in addition to the unexpended balance of thirty-five thousand dollars, the sum of twenty-five thousand dollars;

Mississippi and Missouri rivers.

For continuing the improvement of the Mississippi river above the mouth of the Ohio, and of the Missouri river, forty thousand dollars;

Mississippi River.

For the erection of a pier in the Mississippi river, near Saint Louis, including the sum of fifteen thousand dollars, appropriated for that purpose at the last session of Congress, fifty thousand dollars;

Ohio, Missouri, and Mississippi rivers.

For improving the navigation of the Ohio, Missouri, and Mississippi rivers, and to replace the steam snag-boat, Archimedes, sunk in the Mississippi river in November last, twenty-three thousand dollars;

Steam snag boat Archimedes.

Black and White rivers.

For continuing the survey of Black and White rivers in Arkansas and Missouri, one thousand dollars;

Survey with view to determine practicability of inland communication between the Chesapeake Bay and Charleston, S. C.

For making a survey from the southern debouche of the Dismal Swamp canal, down the Pasquotank river to Elizabeth, thence to Croatan Sound, Pamlico and other sounds, near the coast of North Carolina; and thence by the most practicable route to Winyaw bay, in South Carolina, with a view to determine the practicability of opening an inland communication for steam navigation, from the Chesapeake bay to Charleston South Carolina, ten thousand dollars;

New Brunswick Harbor.

For improving the harbor of New Brunswick, New Jersey, by removing the obstructions in the Raritan river in addition to the appropriation of July four, eighteen hundred and thirty-six, six thousand nine hundred and sixty-three dollars;

When corporate authorities of Alexandria deposit their stock in Alexandria Canal Company in hands of Secretary of the Treasury, with proper instruments, etc., to vest same in him, etc., he is authorized to advance, from time to time, moneys necessary to complete said canal, not exceeding \$800,000.

SEC. 2. *And be it further enacted*, That when the corporate authorities of the town of Alexandria shall deposite [*sic*] the stock held by them in the Alexandria Canal Company, in the hands of the Secretary of the Treasury, with proper and competent instruments and conveyances in law to vest the same in the Secretary of the Treasury and his successors in office, for and on behalf of the United States, to be held in trust upon the same terms and conditions in all respects as the stocks held in the Chesapeake and Ohio Canal by the several cities of this District, were required to be held in and by virtue of the act approved on the seventh day of June, eighteen hundred and thirty-six, entitled "An act for the relief of the several corporate cities of the district of Columbia," that the Secretary of the Treasury be, and he is hereby authorized and directed to advance, out of any moneys in the Treasury not otherwise appropriated, to the Alexandria Canal Company, from time to time, as the progress of the work may require the same, such sums of money, not exceeding three hundred thousand dollars, as may be necessary to complete the said canal to the town and harbor of Alexandria; *Provided*, That the Alexandria Canal Company, in the construction of the re-

Proviso.

maining piers, abutments and works of their aqueduct over the Potomac river, are hereby prohibited and restrained from throwing earth or clay into the open river, and are required with the money furnished by this bill to remove all earth and clay, heretofore deposited by them in the river.

To remove
earth from river,
etc.

Approved, March 3, 1837.

CHAP. 46.—An Act To provide for continuing the construction, and for the repair of certain roads, and for other purposes, during the year eighteen hundred and thirty-seven.

Mar. 3, 1837.
Vol. 5, p. 195.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

SEC. 3. *And be it further enacted,* That the following sums be and the same are hereby appropriated, to be paid out of any money in the Treasury, not otherwise appropriated, to wit: * * *

* * * * *

For defraying the expenses incidental to making examinations and surveys, under the act of the thirteenth [thirtieth?] of April, eighteen hundred and twenty-four, and for geological and mineralogical surveys and researches in the Indian country, on the public lands, and in the territories of the United States, thirty thousand dollars;

Expenses incidental to making examinations, etc., under act Apr. 30, 1824, c. 46, etc.

* * * * *

Approved, March 3, 1837.

CHAP. 34.—An Act To continue in force an Act therein mentioned, relating to the port of Baltimore.

Mar. 19, 1838.
Vol. 5, p. 215.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act passed the seventeenth day of March, in the year one thousand eight hundred, entitled "An act declaring the assent of Congress to certain acts of the States of Maryland and Georgia," and which, by subsequent acts, has been revived and continued in force until the third day of March, one thousand eight hundred and thirty-eight, be, and the same, so far as it relates to the act of Maryland, is hereby revived and continued in force until the third day of March, one thousand eight hundred and forty-three. *Provided,* That nothing herein contained shall authorize the demand of a duty on tonnage on vessels propelled by steam, employed in the transportation of passengers.

Act passed Mar. 17, 1800, c. 15, so far as relates to act of Maryland, continued to Mar. 3, 1843.
1843, c. 45.
Act Jan. 19, 1861, c. 11.

Proviso.

Approved, March 19, 1838.

Apr. 20, 1838.
Vol. 5, p. 228.

CHAP. 59.—An Act Making an appropriation for the removal of the great raft of Red River.

Appropriation
for removal of
Red River raft,
La. and Ark.,
1847, c. 35.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of seventy thousand dollars be appropriated, out of any money in the Treasury not otherwise appropriated, for the complete removal of the great raft in Red River, in the States of Louisiana and Arkansas.

Approved, April 20, 1838.

July 7, 1838.
Vol. 5, p. 264.

CHAP. 169.—An Act To provide for the support of the Military Academy of the United States for the year eighteen hundred and thirty-eight, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Appropriations.

SEC. 5. *And be it further enacted, That the following sums be, and the same are hereby appropriated, out of any unappropriated money in the Treasury, viz.:*

* * * * *

Surveys by
civil engineers.

For an outstanding balance of expenditure for surveys by the civil engineers, to enable that Department to settle and close the account for those surveys, two thousand dollars.

* * * * *

Approved, July 7, 1838.

July 7, 1838.
Vol. 5, p. 268.

CHAP. 171.—An Act To provide for certain harbors and for the removal of obstructions in and at the mouths of certain rivers, and for other purposes, during the year one thousand eight hundred and thirty-eight.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for carrying on and completing certain works heretofore commenced, viz:

Chicago Har-
bor.

For continuing the improvement of the harbor of Chicago, Illinois, thirty thousand dollars;

Michigan City
Harbor.

For continuing the construction of a harbor at Michigan City, Indiana, sixty thousand seven hundred and thirty-three dollars and fifty-nine cents;

St. Joseph pier
or breakwater.

For continuing the construction of a pier or breakwater at the mouth of the river Saint Joseph, Michigan, fifty-one thousand one hundred and thirteen dollars;

Raisin Har-
bor.
(Monroe)

For the continuation of the works at the harbor near the mouth of the river Raisin, Michigan, fifteen thousand dollars;

For continuing the improvement of the harbor at the mouth of Black river, in Jefferson county, State of New York, twenty-two thousand four hundred and one dollars; Harbor at mouth of Black River.

For continuing the improvement of the harbor at Whitehall, in the State of New York, fifteen thousand dollars; Whitehall Harbor.

For continuing the improvement of the channel at the mouth of Genesee river, in the State of New York, twenty-five thousand dollars; Genesee River (Charlotte Harbor).

For continuing the removal of obstructions at Black river, Ohio, five thousand dollars; Black River (Lorain Harbor).

For continuing the removal of obstructions at the mouth of the Huron river, in Ohio, five thousand dollars; Huron River.

For continuing the improvement of the navigation at the mouth of Vermillion river, Ohio, twenty-three thousand six hundred and twenty-six dollars and fifty-seven cents; Vermillion River.

For continuing the improvement of Cleaveland harbor, Ohio, fifty-one thousand eight hundred and fifty-six dollars; Cleveland Harbor.

For continuing the removal of obstructions at Cunningham creek, Ohio, five thousand dollars; Cunningham Creek.

For continuing the removal of obstructions at Ashtabula creek, Ohio, eight thousand dollars; Ashtabula Creek.

For continuing the removal of obstructions at Conneaut creek, Ohio, eight thousand dollars; Conneaut Creek.

For continuing the improvement of the harbor of Presque isle, Pennsylvania, thirty thousand dollars; Presque Isle (Erie) Harbor.

For continuing the improvement of Dunkirk harbor, New York, ten thousand dollars; Dunkirk Harbor.

For continuing the improvement of the harbor of Portland, Lake Erie, New York, thirty-five thousand four hundred and sixty-six dollars; Portland Harbor, N. Y.

For continuing the improvement of the harbor at Cattaraugus creek, Lake Erie, New York, thirty-two thousand four hundred and ten dollars; Cattaraugus Creek Harbor.

For continuing the improvement of the harbor of Salmon river^a, Lake Ontario, New York, thirty thousand dollars; Salmon River (Port Ontario Harbor).

For continuing the construction of a breakwater at Plattsburg, New York, twenty-seven thousand five hundred dollars; Plattsburg breakwater.

For continuing the improvement of the harbor at the mouth of Oak Orchard creek, New York, five thousand dollars; Oak Orchard Creek Harbor.

For continuing the pier at Kennebunk, Maine, eight thousand dollars; Pier at Kennebunk.

For continuing the improvement of Big Sodus bay, New York, ten thousand dollars; Great Sodus Bay.

For continuing the pier and mole at Oswego harbor, New York, forty-six thousand and sixty-seven dollars; Pier and mole at Oswego Harbor.

For continuing the construction of a breakwater at Burlington, Vermont, fifty thousand dollars; Breakwater at Burlington.

^a Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

- Breakwater on Stanford's ledge. For continuing the breakwater on Stanford's Ledge, Portland harbor, Maine, twenty-six thousand three hundred and sixty-six dollars;
- Breakwater at Hyannis. For continuing the breakwater at Hyannis harbor, Massachusetts, eight thousand seven hundred and sixty-four dollars;
- Sandy Bay (Rockport Harbor). For continuing the breakwater at Sandy Bay, Massachusetts, twenty thousand dollars;
- River Thames. For continuing the improvement of the channel of the river Thames, leading into Norwich harbor, Connecticut, ten thousand dollars;
- Westport Harbor. For improving the harbor of Westport, Connecticut, four thousand seven hundred and eighty-two dollars;
- Hudson River. For continuing the improvement of the navigation of the Hudson river, above and below Albany, in the State of New York, one hundred thousand dollars; to be expended according to the plan and estimate recommended by the Secretary of War;
- Wilmington Harbor. For continuing the improvement of the harbor of Wilmington, Delaware, nine thousand three hundred and fifty-six dollars;
- Newcastle Harbor. For continuing the improvement of the harbor of New Castle, Delaware, eleven thousand five hundred and seventy-three dollars;
- Delaware Breakwater. For continuing the Delaware breakwater, one hundred and fifty thousand dollars;
- Baltimore Harbor. For continuing the improvement of the harbor of Baltimore, Maryland, twenty thousand dollars;
- Cape Fear River. For continuing the improvement of the navigation of Cape Fear river, below Wilmington, North Carolina, twenty thousand dollars;
- Opening passage between Beaufort and Pamlico Sound, and improving New River. For opening a passage of fifty yards wide, and seven feet deep, at low water, between the town of Beaufort and Pamlico sound, North Carolina, and for improving New river, twenty-five thousand dollars;
- Pamlico River. For continuing the improvement of Pamlico, or Tar river, below Washington, North Carolina, five thousand dollars;
- Inland channel between St. Marys and St. Johns. For continuing the improvements of the inland channel between St. Mary's and St. John's, Florida, twenty-nine thousand dollars;
- Dog River bar and Choctaw Pass, Mobile Harbor. For continuing the improvement at Dog river bar, and Choctaw pass, in Mobile harbor, fifty thousand dollars;
- Cumberland River. For continuing the improvement of the Cumberland river, in Kentucky and Tennessee, below Nashville, twenty thousand dollars;
- Ohio River. For continuing the improvement of the Ohio river, between the falls and Pittsburgh, fifty thousand dollars;
- Ohio and Mississippi rivers. For continuing the improvement of the navigation of the Ohio and Mississippi rivers, from Louisville to New Orleans, seventy thousand dollars;
- Mississippi and Missouri rivers. For continuing the improvement of the Mississippi river, above the mouth of the Ohio, and of the Missouri river, twenty thousand dollars;

For continuing the removal of obstructions in Grand river, Ohio, ten thousand dollars; Grand River (Fairport Harbor).

For continuing the works at Buffalo harbor, twenty thousand five hundred dollars; and for erecting a mound or sea-wall along the peninsula which separates Lake Erie from Buffalo creek, to prevent the influx at the lake over said peninsula, forty-eight thousand dollars; Works at Buffalo Harbor, etc.

For continuing the preservation of Plymouth beach, two thousand four hundred dollars; Plymouth beach.

For continuing the preservation of Provincetown harbor, four thousand five hundred dollars; Provincetown Harbor.

For continuing the preservation of Rainsford island, seven thousand three hundred and fifty-three dollars; Rainsford Island (Boston Harbor).

For continuing the sea-wall for the preservation of Fayerweather [Fayerweather] island, and repairing the breakwater near Black Rock harbor, Connecticut, eleven thousand five hundred and fifty dollars; Fayerweather Island sea wall.

For continuing the improvement of the harbor at the mouth of Bass river, Massachusetts, ten thousand dollars; Harbor at mouth of Bass River.

For continuing the breakwater of Church's cove [^a], town of Little Compton, Rhode Island, eighteen thousand dollars; Breakwater of Church's Cove.

For the protection and improvement of Little Egg harbor, ten thousand dollars; Little Egg Harbor.

For improving the natural channels at the northern and southern entrances of the Dismal Swamp canal, ten thousand dollars; Entrances of Dismal Swamp Canal.

For the improvement of the navigation of Savannah river, Georgia, fifteen thousand dollars; Savannah River.

For the improvement of the Arkansas river, forty thousand dollars; Arkansas River.

For removing the sand-bar occasioned by the wreck in the harbor of New Bedford, the unexpended balance of an appropriation of ten thousand dollars, made July four, eighteen hundred and thirty-six, being seven thousand six hundred and ninety-one dollars and thirty-seven cents. Removal of sand bar in New Bedford Harbor. 1836, c. 363.

SEC. 2. *And be it further enacted*, That the appropriation heretofore made of ten thousand dollars, for removing the mud shoal, called the Bulkhead, in the harbor of Appalachicola, be, and the same is hereby, transferred to the deepening of the straight channel in the same harbor. Deepening straight channel in Appalachicola Harbor.

SEC. 3. *And be it further enacted*, That of the several sums appropriated by the first section of this act, which exceed twelve thousand dollars each, one half thereof, if the public service require it, shall be paid out during the year eighteen hundred and thirty-eight, to be applied to the objects as above specified, and the other half in like manner, in the year eighteen hundred and thirty-nine. Of sums appropriated by sec. 1 of this act, which exceed \$12,000, one-half shall be paid out in 1838 and the other in 1839.

Approved, July 7, 1838.

^a This cove has sometimes been called Fishing Place Cove; it is known also as Sakonnet Point Harbor.

July 7, 1838.
Vol. 5, p. 303.

CHAP. 190.—An Act Making appropriations for certain roads in the Territory of Wisconsin.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby appropriated for the construction of roads in the Territory of Wisconsin, to wit:

* * * * *

Survey for im-
provement of
navigation of
Rock River.

For the survey, with the view of the improvement of the navigation of Rock river, from the Illinois line, as far up the same as the contemplated point of intersection with the Milwaukee and Rock river canal, and also of the Haven^a of the said river, next below Lake Kushkenong [Koshkonong] to Madison, the seat of Government of the Territory of Wisconsin, a sum not exceeding one thousand dollars.

Survey of Des
Moines and Iowa
rivers.

For the survey of the Des Moines and Iowa rivers, with a view to the improvement of their navigation, a sum not exceeding one thousand dollars.

* * * * *

Approved, July 7, 1838.

Mar. 3, 1839.
Vol. 5, p. 328.

CHAP. 72.—An Act To authorize the construction of certain improvements in the Territory of Wisconsin and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the further survey and estimate of the cost of improving the navigation of the Neenah [Fox] and Wisconsin rivers and connecting the same by a navigable canal or water communication, two thousand dollars be, and the same are hereby appropriated; * * *

* * * * *

Approved, March 3, 1839.

Mar. 3, 1839.
Vol. 5, p. 320.

CHAP. 76.—An Act Making appropriations for building a pier at the northern extremity of Winnebago Lake, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the security of the navigation of the commerce of the United States, the following sums be, and the same hereby are, appropriated to be paid out of any money in the Treasury not otherwise appropriated, and to be applied to the following objects:

^a Four lakes, called Mendota, Monona, Waubesa, and Kegonsa, with their outlet, the Catfish River (River of the Four Lakes), which empties into Rock River, constitute the haven, so called. Madison is situated on an isthmus between the two lakes first mentioned, the two other lakes being farther downstream.

For building a pier at the northern extremity of Winnebago lake, in the Territory of Wisconsin, the sum of five hundred dollars;

Pier at northern extremity of Winnebago Lake, Fox River.

* * * *

Approved, March 3, 1839.

CHAP. 78.—An Act For the improvement and survey of certain rivers, and the repair of certain roads in Florida.

Mar. 3, 1839.
Vol. 5, p. 331.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, to be paid out of any money in the Treasury, not otherwise appropriated, for the purposes herein specified, that is to say,

For the removal of obstructions at the mouth of the Suwannee river, and for the survey of the said river, with a view to its improvement, fifteen thousand dollars;

Removal of obstructions at mouth, and survey of, Suwannee River.
Survey of Yellow River.

For the survey of Yellow river [^a], Florida, to ascertain the practicability and cost of removing the rafts which obstruct its navigability, five hundred dollars;

* * * *

Approved, March 3, 1839.

CHAP. 82.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year eighteen hundred and thirty-nine.

Mar. 3, 1839.
Vol. 5, p. 339.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby appropriated, to be paid out of any unappropriated money in the Treasury, viz:

* * * *

For deepening the straight channel of the east pass to Appalachicola, Florida, being the balance of an appropriation transferred to this improvement, and since carried to the surplus fund, nine thousand nine hundred dollars;

Reappropriation for East Pass to Appalachicola.

For improving the harbor of Saybrook, by removing the bar at the mouth of Connecticut river, being the balance of an appropriation carried to the surplus fund, fifteen thousand seven hundred and ten dollars;

Reappropriation for Saybrook Harbor, Conn.

* * * *

Approved, March 3, 1839.

^a Known also as Yellowwater River. It is distinct from Yellow River, Georgia.

Mar. 3, 1839.
Vol. 5, p. 352.

CHAP. 86.—An Act To authorize the construction of a road from Dubuque, in the Territory of Iowa, to the northern boundary of the State of Missouri, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Secretary of War to cause survey of Red Cedar River, Iowa, and estimate to be made.

SEC. 2. *And be it further enacted,* That the Secretary of War be, and he is hereby, empowered to cause a survey of Red Cedar river, within the said Territory, and an estimate to be made, with a view to the improvement of the navigation thereof above the town of Moscow, and the connection of the said navigation with the river Mississippi by a canal, extending from the vicinity of said town to some suitable point in or near the town of Bloomington; and to defray the expense of said survey and estimate, the sum of fifteen hundred dollars be, and the same is hereby, appropriated, out of any money in the Treasury not otherwise appropriated.

\$1,500 appropriated.

* * * * *

Approved, March 3, 1839.

May 8, 1840.
Vol. 5, p. 371.

CHAP. 22.—An Act Making appropriations for the civil and diplomatic expenses of the Government for the year eighteen hundred and forty.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the Treasury, viz:

* * * * *

Payment to W. G. McNeill, Apalachicola Bay.

For compensation to William Gibbs McNeill, being an excess of expenditure over and above the appropriation for surveys made under his direction of the East pass of the Apalachicola Bay, one hundred and fifty dollars and twenty-nine cents;

* * * * *

Approved, May 8, 1840.

July 20, 1840.
Vol. 6, p. 807.

CHAP. 80.—An Act For the relief of Ebenezer Lobdell.

To be paid for extra labor in removing obstructions from River Kennebec, Me.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to pay to Ebenezer Lobdell, out of any money in the treasury not otherwise appropriated, the sum of one thousand and seventy-five dollars and thirty-nine cents, for extra labor in clearing out certain obstructions

in the river Kennebec, not within the terms of a contract executed by him and Peter Grant, the agent of the United States, on the thirtieth day of May, eighteen hundred and twenty-nine.

Approved, July 20, 1840.

CHAP. 12.—An Act To confirm to the State of Indiana the land selected by her for that portion of the Wabash and Erie Canal which lies between the mouth of the Tippecanoe River and Terre Haute, and for other purposes.

Feb. 27, 1841.

Vol. 5, p. 414.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and there hereby is, confirmed to the State of Indiana, the land selected by her, under the provisions of the act of second of March, eighteen hundred and twenty-seven, entitled "An act to grant a certain quantity of land to the State of Indiana, for the purpose of aiding the State in opening a canal to connect the waters of the Wabash with those of Lake Erie," for that portion of the canal between the mouth of the Tippecanoe river and Terre Haute, as returned by said State to the Secretary of the Treasury.

Wabash and
Erie Canal.

Land selected
by Indiana under
act of Mar.
2, 1827, c. 56, con-
firmed to her.
1834, c. 137;
1845, c. 42.

SEC. 2. *And be it further enacted, That* should any of said lands, at the time of their selection and location by the State, have been subject to any right of pre-emption, or other legal incumbrance, the State of Indiana shall be, and she hereby is, authorized to select, of any lands subject to private entry in said State, other lands in lieu of so much thereof as may be so incumbered, and, upon return of a description of the same to the Secretary of the Treasury, the same shall be, and hereby is, confirmed to the State: *Provided*, That no more land shall be selected, or hereby confirmed, than a quantity equal to one half of five sections in width on each side of said canal, from the mouth of the Tippecanoe river to Terre Haute.

Indiana au-
thorized to select
other lands in
lieu of those sub-
ject to preemp-
tion, etc.

Proviso.

Approved, February 27, 1841.

CHAP. 24.—An Act Making appropriations for certain fortifications of the United States, for the year one thousand eight hundred and forty-one.

Mar. 3, 1841.

Vol. 5, p. 415.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the Treasury, for the preservation, repairs, construction, and incidental and contingent expenses of certain fortifications, in the year eighteen hundred and forty-one, viz.:

* * * * *

For repairs of sea-wall on Deer island, Boston harbor,
one thousand five hundred dollars;

Deer Island.

Rainsford Is- For repairs of sea-wall on Rainsford island, Boston har-
land. bor, one thousand dollars;
St. Augustine, For continuing sea-wall at St. Augustine, fifteen thou-
Fla. sand dollars;

* * * * *

Approved, March 3, 1841.

Mar. 3, 1841.
Vol. 5, p. 415.

CHAP. 25.—An Act To provide for the support of the Military Academy for the year one thousand eight hundred and forty-one.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

Balance due
Lyon & Howard
for steamdredges
on Lake Michi-
gan.

SEC. 2. *And be it further enacted,* That there be, and hereby is, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, the sum of four thousand three hundred and sixty-nine dollars, to pay a balance certified by the Topographical Bureau to be due to Lyon and Howard, as the balance upon a contract for building two steam dredging machines upon Lake Michigan.

Approved, March 3, 1841.

Mar. 3, 1841.
Vol. 5, p. 433.

CHAP. 36.—An Act Making appropriations for the support of the Army for the year one thousand eight hundred and forty-one.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same hereby are, appropriated to be paid out of any money in the Treasury not otherwise appropriated, for the support of the army for the year one thousand eight hundred and forty-one;

* * * * *

For removing
Red River raft.

* * * for removing the raft of Red river under the direction of the Secretary of War seventy-five thousand dollars;

* * * * *

Approved, March 3, 1841.

Sept. 4, 1841.
Vol. 5, p. 453.

CHAP. 16.—An Act To appropriate the proceeds of the sales of the public lands, and to grant pre-emption rights.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the thirty-first day of December, in the year of our Lord one thousand eight hundred and forty-one, there be allowed and paid to each of the States of Ohio, Indiana, Illinois, Alabama, Missouri, Mississippi, Louisiana, Arkansas, and Michigan, over and above what each of the said States is entitled to by the terms of the compacts entered into between them and the United States, upon

Certain States to be paid 10 per cent on net proceeds of sales of public lands therein, in addition to what they are entitled by certain compacts.

their admission into the Union, the sum of ten per centum upon the nett [*sic*] proceeds of the sales of the publiclands, which, subsequent to the day aforesaid, shall be made within the limits of each of said States respectively: *Provided*, That the sum so allowed to the said States, respectively, shall be in no wise affected or diminished on account of any sums which have been heretofore, or shall be hereafter, applied to the construction or continuance of the Cumberland road, but that the disbursements for the said road shall remain, as heretofore, chargeable on the two per centum fund provided for by compacts with several of the said States.

Proviso.
Said sum not affected by sums applied to Cumberland road.

* * * * *

SEC. 8. *And be it further enacted*, That there shall be granted to each State specified in the first section of this act five hundred thousand acres of land for purposes of internal improvement: *Provided*, that to each of the said States which has already received grants for said purposes, there is hereby granted no more than a quantity of land which shall, together with the amount such State has already received as aforesaid, make five hundred thousand acres, the selections in all of the said States, to be made within their limits respectively in such manner as the Legislatures thereof shall direct; and located in parcels conformably to sectional divisions and subdivisions, of not less than three hundred and twenty acres in any one location, on any public land except such as is or may be reserved from sale by any law of Congress or proclamation of the President of the United States, which said locations may be made at any time after the lands of the United States in said States respectively, shall have been surveyed according to existing laws. And there shall be and hereby is, granted to each new State that shall be hereafter admitted into the Union, upon such admission, so much land as, including such quantity as may have been granted to such State before its admission, and while under a Territorial Government, for purposes of internal improvement as aforesaid, as shall make five hundred thousand acres of land, to be selected and located as aforesaid.

500,000 acres of land to be granted to States specified in sec. 1, for internal improvements.

Proviso.
Grants heretofore made for such purposes to be included in said 500,000.

Selections, where to be made, and how.
To be located, how, where, and when.

Quantity granted to new States that shall hereafter be admitted.

SEC. 9. *And be it further enacted*, That the lands herein granted to the States above named shall not be disposed of at a price less than one dollar and twenty-five cents per acre, until otherwise authorized by a law of the United States; and the nett [*sic*] proceeds of the sales of said lands shall be faithfully applied to objects of internal improvement within the States aforesaid, respectively, namely: Roads, railways, bridges, canals and improvement of water-courses, and draining of swamps; and such roads, railways, canals, bridges and water-courses, when made or improved, shall be free for the transportation of the United States mail, and munitions of war, and for the passage of their troops, without the payment of any toll whatever.

Said lands not to be sold for less than \$1.25 per acre.

Net proceeds to be faithfully applied to internal improvements—objects specified.

Roads, etc., to be free for transportation of United States mail, etc.

* * * * *

The 2 per cent
relinquished to
Alabama—pay-
able when.

1819, c. 47.

Proviso.
Alabama, first
to pass act ac-
cepting same and
embracing cer-
tain provision
for its applica-
tion.

SEC. 17. *And be it further enacted*, That the two per cent. of the nett [*sic*] proceeds of the lands sold by the United States, in the State of Alabama, since the first day of September, eighteen hundred and nineteen, and reserved by the act entitled "An act to enable the people of the Alabama Territory to form a constitution and State government, and for the admission of such State into the Union on an equal footing with the original States," for the making of a road or roads leading to the said State, be, and the same is hereby, relinquished to the said State of Alabama, payable in two equal instalments, the first to be paid on the first day of May, eighteen hundred and forty-two, and the other on the first day of May, eighteen hundred and forty-three, so far as the same may then have accrued, and quarterly, as the same may thereafter accrue: *Provided*, That the Legislature of said State shall first pass an act, declaring their acceptance of said relinquishment, and also embracing a provision, to be unalterable without the consent of Congress, that the whole of said two per cent. fund shall be faithfully applied, under the direction of the Legislature of Alabama, to the connection, by some means of internal improvement, of the navigable waters of the bay of Mobile with the Tennessee river, and to the construction of a continuous line of internal improvements from a point on the Chattahoochie river, opposite West Point, in Georgia, across the State of Alabama, in a direction to Jackson, in the State of Mississippi.

Approved, September 4, 1841.

Sept. 9, 1841.
Vol. 5, p. 458.

CHAP. 17.—An Act Making appropriations for various fortifications, for ordnance, and for preventing and suppressing Indian hostilities.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, namely:

* * * * *

St. Augustine.

For continuing sea-wall at Saint Augustine, Florida, five thousand dollars;

* * * * *

SEC. 3. *And be it further enacted*, That the following sums be in like manner appropriated:

* * * * *

Arrearages for
roads, harbors,
rivers, etc.

For arrearages due for roads, harbors, and rivers, where public works and improvements have hitherto been made, and for the protection of public property now on hand at these places, and for arrearages for surveys and completing maps authorized by act of March third, eighteen hundred and thirty-nine, forty thousand dollars;

* * * * *

Approved, September 9, 1841.

No. 6. A Joint Resolution making it the duty of the Attorney-General to examine into the titles of the lands or sites for the purpose of erecting thereon armories and other public works and buildings, and for other purposes. Sept. 11, 1841.
Vol. 5, p. 468.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be the duty of the Attorney General of the United States to examine into the titles of all the lands or sites which have been purchased by the United States, for the purpose of erecting thereon armories, arsenals, forts, fortifications, navy yards, custom-houses, light-houses, or other public buildings of any kind whatever, and report his opinion as to the validity of the title in each case, to the President of the United States. Attorney-General to make examination and report to President.
Vol. 25, p. 94;
post, p. 479.

2. *Resolved*, That it shall be the duty of all the officers of the United States having any of the title papers to the property aforesaid in their possession, to furnish them forthwith to the Attorney General, to aid him in the investigation aforesaid. Title papers to be furnished to Attorney-General.

3. *Resolved*, That no public money shall be expended upon any site or land hereafter to be purchased by the United States for the purposes aforesaid, until the written opinion of the Attorney General shall be had in favor of the validity of the title, and also the consent of the Legislature of the State in which the land or site may be shall be given to said purchaser ^[a]. Public money not to be expended on any site or land hereafter purchased until, etc.

4. *Resolved*, That it shall be the duty of the District Attorneys of the United States, upon the application of the Attorney General, to furnish any assistance or information in their power in relation to the titles of the public property aforesaid lying within their respective districts. District attorneys to furnish assistance.

5. *Resolved*, That it shall be the duty of the Secretaries of the Executive Departments, upon the application of the Attorney General, to procure any additional evidence of title which he may deem necessary, and which may not be in the possession of the officers of Government; the expense of procuring which to be paid out of the appropriations made for the contingencies of the Departments respectively. Secretaries of Executive Departments to procure additional evidence.

6. *Resolved*, That it shall be the duty of the Secretaries of the Executive Departments, respectively, under whose direction any lands for the purposes aforesaid may have been purchased, and over which the United States do not possess jurisdiction, to apply to the Legislatures of the States in which the lands are situated, for a cession of jurisdiction, and in case of refusal, to report the same to Congress at the commencement of the next session thereafter. Secretaries of Executive Departments to apply to State legislatures for jurisdiction over said lands, etc.

Approved, September 11, 1841.

^a See act approved Apr. 24, 1888, page 479 hereof.

June 4, 1842.
Vol. 6, p. 829.

CHAP. 35.—An Act For the relief of the Plumb Island Bridge and Turnpike Company.

To be paid \$8,000
for destruction of
bridge across
Merrimac River.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there be paid to the Plumb Island Bridge and Turnpike Company, of Newburyport, in the State of Massachusetts, out of any money in the Treasury not otherwise appropriated, the sum of eight thousand dollars, for the destruction of a bridge, occasioned by the construction of a break-water by the United States.

Approved, June 4, 1842.

Aug. 23, 1842.
Vol. 5, p. 508.

CHAP. 183.—An Act Making appropriations for the support of the Army, and of the Military Academy, for the year one thousand eight hundred and forty-two.

Appropriations
for Army.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same hereby are, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for the support of the army for the year one thousand eight hundred and forty-two.

* * * * *

Arrearages and
preservation of
public property.

For arrearages and for the preservation of the public property at the several places of harbor and river improvement, fifteen thousand dollars.

* * * * *

SEC. 3. *And be it further enacted,* * * *

* * * * *

Improvements
on western riv-
ers.

For building and repairing the necessary boats, and for carrying on the improvements on the Missouri, Mississippi, Ohio, and Arkansas rivers, one hundred thousand dollars, under the direction of the Secretary of War; and, for the preservation and repairs of public works heretofore constructed for the improvement of harbors, thirty thousand dollars.

Approved, August 23, 1842.

Aug. 31, 1842.
Vol. 5, p. 582.

CHAP. 288.—An Act Making appropriations for certain fortifications of the United States, for the year one thousand eight hundred and forty-two.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the Treasury, for the preservation, repairs, and construction of certain fortifications, in the year eighteen hundred and forty-two, viz.:

* * * * *

Deer Island.

For repairs of sea-wall on Deer Island, Boston harbor, two thousand dollars.

* * * * *

Approved, August 31, 1842.

CHAP. 45.—An Act To continue in force an Act therein mentioned, relating to the port of Baltimore. Feb. 24, 1843.
Vol. 5, p. 602.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act passed the seventeenth day of March, one thousand eight hundred, entitled “An act declaring the assent of Congress to certain acts of the States of Maryland and Georgia,” and which by subsequent acts has been revived and continued in force until the third of March, one thousand eight hundred and forty-three, be, and the same, so far as it relates to the act of the State of Maryland, is hereby revived and continued in force until the first day of June, in the year one thousand eight hundred and fifty: *Provided, That* nothing herein contained shall authorize the demand of a duty on tonnage on vessels propelled by steam employed in the transportation of passengers.

Act Mar. 17,
1800, c. 15, so far
as relates to
Maryland, revived
and continued
to June 1, 1850,
act Jan. 19, 1861,
c. 11.

Proviso.
1850, c. 17.

Approved, February 24, 1843.

CHAP. 52.—An Act Making appropriations for the support of the Army and of the Military Academy, and for armories, arsenals, arms and munitions of war, and surveys, for the half calendar year ending the thirtieth day of June, one thousand eight hundred and forty-three, and for the fiscal year beginning the first day of July, one thousand eight hundred and forty-three, and ending the thirtieth day of June, one thousand eight hundred and forty-four.

Mar. 1, 1843.
Vol. 5, p. 604.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same hereby are, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for the support of the army and of the military academy, and for armories, arsenals, arms and munitions of war, and surveys, for the half calendar year, commencing on the first day of January, and ending the thirtieth day of June, one thousand eight hundred and forty-three, and for the fiscal year beginning the first day of July, one thousand eight hundred and forty-three, and ending the thirtieth day of June, one thousand eight hundred and forty-four:

* * * * *

For surveys in reference to the military defences of the frontier, inland and Atlantic, for the said fiscal year, including a survey of the direct communication from Albemarle Sound to the Atlantic ocean, with a view to re-open a ship channel^a, fifteen thousand dollars.

Surveys.

* * * * *

^aThe report on this item had reference to connecting Croatan and Roanoke sounds with the ocean by the reopening of Roanoke Inlet, at Nags Head, N. C.

Improvements
on western riv-
ers.

For the continuation of improvements on the Missouri, Mississippi, Ohio and Arkansas rivers, for said half year, fifty thousand dollars; and for said fiscal year, one hundred thousand dollars.

* * * *

Approved, March 1, 1843.

Mar. 1, 1843.
Vol. 6, p. 888.

CHAP. 67.—An Act For the relief of George Randall, John C. Haskell, and Elisha H. Holmes.

To be paid for
removing bar at
Saybrook, Con-
necticut River.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to George Randall, John C. Haskell, and Elisha H. Holmes, or their legal representatives, the sum of three thousand four hundred and seventy-one dollars, and fifty-seven cents, out of any money in the treasury not otherwise appropriated, being the amount of labor bestowed and expenses incurred by them as contractors for removing the bar at Saybrook, in the state of Connecticut, over and above the amount appropriated by the twenty-fourth Congress for that purpose.

Approved, March 1, 1843.

Mar. 3, 1843.
Vol. 5, p. 207.

CHAP. 70.—An Act Making appropriations for certain fortifications of the United States for the half calendar year beginning on the first day of January and ending on the thirtieth day of June, one thousand eight hundred and forty-three; and for the fiscal year beginning on the first day of July, one thousand eight hundred and forty-three and ending on the thirtieth day of June, one thousand eight hundred and forty-four.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, to be paid out of any unappropriated money in the Treasury, for the preservation, repairs, and construction of certain fortifications, for the half calendar year beginning on the first day of January, and ending on the thirtieth day of June, one thousand eight hundred and forty-three; and for the fiscal year beginning on the first day of July, one thousand eight hundred and forty-three, and ending on the thirtieth day of June, one thousand eight hundred and forty-four:

* * * *

Lovells Island.

For sea-wall on Lovell's island, Boston harbor, for the said fiscal year, sixteen thousand dollars.

* * * *

Approved, March 3, 1843.

CHAP. 85.—An Act For the protection of commerce on Lake Michigan.Mar. 3, 1843.
Vol. 5, p. 619.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, for the protection of commerce on Lake Michigan.

For the half calendar year from the first of January to thirtieth June, eighteen hundred and forty-three; and for the fiscal year from the first day of July, eighteen hundred and forty-three, to the thirtieth June eighteen hundred and forty-four, viz:

For the construction of a harbor at the most suitable situation at or near Milwaukee in the Territory of Wisconsin, to be made under the survey of an officer to be appointed by the Secretary of War, for the said half calendar year, fifteen thousand dollars; and for the said fiscal year, fifteen thousand dollars.

Milwaukee Harbor.

* * * * *

For continuing the public works at the harbor of Chicago, in the State of Illinois, for the said half calendar year, ten thousand dollars; and for the said fiscal year, fifteen thousand dollars.

Chicago Harbor.

For continuing the public works at the harbor of St. Joseph in the State of Michigan; for the said half calendar year, ten thousand dollars; and for the said fiscal year, fifteen thousand dollars.

St. Joseph Harbor.

SEC. 2. *And be it further enacted,* That before the money hereby appropriated for the construction of a harbor at or near said Milwaukee, shall be expended, the corps of topographical engineers shall select from actual examination and survey the point of location of said harbors.

Location of Milwaukee Harbor.

Approved, March 3, 1843.

CHAP. 147.—An Act For the relief of Samuel Weller.Mar. 3, 1843.
Vol. 6, p. 898.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the accounting officers of the treasury department be, and they are hereby, directed and required to ascertain the quantity of timber, stone and other materials delivered by Samuel Weller, after the twentieth of March, one thousand eight hundred and thirty-nine, for the construction of a breakwater at the harbor at Plattsburg, Lake Champlain, New York, under certain agreements made with the superintendent for the construction of said breakwater, in the summer or fall of one thousand eight hundred and thirty-eight, and of the eighth of February, one thousand eight hundred and thirty-nine; and when the quantity is so ascertained of the size and quality described in said

To be paid for materials furnished for breakwater at Plattsburg.

contracts, that the Secretary of the Treasury be, and he is hereby, authorized and directed to pay to said Samuel Weller, the prices stipulated in said contracts for the same, out of any moneys in the treasury not otherwise appropriated.

Approved, March 3, 1843.

June 11, 1844.

Vol. 5, p. 661.

CHAP. 44.—An Act Making appropriations for the improvement of certain harbors and rivers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, to be paid out of any unappropriated money in the treasury, for the prosecution and completion of the following works, viz:

Ohio River. For the improvement of the Ohio river between Pittsburgh and the Falls of Louisville, one hundred thousand dollars:

For the improvement of the Ohio river below the Falls at Louisville, and of the Mississippi, Missouri, and Arkansas rivers, one hundred and eighty thousand dollars:

Harbor of St. Louis. For removing obstructions to the navigation in the harbor of St. Louis, twenty-five thousand dollars:

Breakwater at Burlington, Vt. For the continuation of the breakwater structure at Burlington, Lake Champlain, State of Vermont, ten thousand dollars:

Breakwater at Plattsburg, N. Y. For the continuation of the breakwater structure at Plattsburg, on Lake Champlain, State of New York, ten thousand dollars:

Port Ontario. For the continuation of the works at Port Ontario, Lake Ontario, five thousand dollars:

Harbor of Oswego, N. Y. For the continuation of the works at the harbor of Oswego, Lake Ontario, State of New York, twenty thousand dollars:

Genesee River (Charlotte Harbor), N. Y. For the further removal of obstructions at the mouth of the Genesee river, in the State of New York, ten thousand dollars:

Oak Orchard Creek. For the continuation of the work at Oak Orchard Creek, Lake Ontario, five thousand dollars:

Great Sodus Bay. For continuing the improvement at Big Sodus bay, Lake Ontario, five thousand dollars:

Harbor at Buffalo, N. Y. For continuation and enlargement of the present harbor at Buffalo, State of New York, forty thousand dollars:

Dunkirk, N. Y. For continuation of the works at Dunkirk, State of New York, five thousand dollars:

Erie Harbor. For continuation of the works at the harbor of Erie, on Lake Erie, forty thousand dollars:

Conneaut Harbor, Ohio. For the continuation of the works at Conneaut harbor, in the State of Ohio, five thousand dollars:

Harbor of Ashtabula, Ohio. For continuing the improvement of the harbor at Ashtabula, Ohio, five thousand dollars:



For the further improvement of Grand River harbor, in the State of Ohio, ten thousand dollars:

For continuing the works at the Huron harbor, on Lake Erie, five thousand dollars:

For the continuation of the works at the harbor of Cleveland, Ohio, twenty-five thousand dollars:

For the preservation of the harbor at Sandusky city, Ohio, and improving the same, fifteen thousand dollars, the same to be expended under the orders of the Secretary of War, and according to such plan of improvement as may be recommended by him:

For the further improvement of River Raisin harbor, Michigan, twenty thousand dollars:

For the further improvement of the harbor at St. Joseph, Michigan, twenty thousand dollars:

For continuing the improvement of the harbor of Michigan city, State of Indiana, twenty-five thousand dollars:

For the further improvement of the harbor of Chicago, Illinois, thirty thousand dollars:

For continuing the works at the harbor at Milwaukee, Wisconsin, twenty thousand dollars:

For the preservation and repair of harbors on the lakes, other than those enumerated, the construction of which has been authorized by law, and which have been partially completed, twenty thousand dollars.

Approved, June 11, 1844.

CHAP. 50.—An Act Granting a section of land for the improvement of Grant River at the town of Potosi, in Wisconsin Territory.

June 15, 1844.
Vol. 5, p. 663.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the Territory of Wisconsin, section number thirty-four, in township number three north, in range number three west, of the fourth principal meridian in the said Territory, for the purpose of improving Grant river, known as the Grant Slue, at the town of Potosi, in the said Territory, and for no other use or purpose whatever: and the said land shall be surveyed, and divided into lots, and shall be sold and disposed of in such manner, and under such regulations and restrictions, as the Legislature of the said Territory shall establish: *Provided,* That in disposing of the same, pre-emption rights shall be granted to actual settlers and occupants residing on said lots, at the time of the passage of this act, according to the provisions and restrictions in the next section provided.

SEC. 2. *And be it further enacted,* That the Surveyor-General of Wisconsin and Iowa, shall appoint three disinterested commissioners, whose duty it shall be to view and examine all the lots which are actually occupied and improved, and assess the true value of said lots, without taking into the estimation, any of the improvements on the same;

One section of land granted; to be divided into lots and disposed of.

Proviso. Preemption right to be granted to actual settlers.

Commissioners to be appointed to value occupied lots and occupants to pay assessed value within one year.

and the occupants of said lots, by paying, within one year from the passage of this act, the assessed value as aforesaid of their respective lots, shall be entitled to the right of pre-emption as aforesaid; and upon the failure of any, or all said occupants to do so, the said lot or lots to the extent of such failure, shall be sold as other lots in said town: *Provided*, That the said occupants may at any time before said lots are sold, pay the assessed value and thereby save their right of pre-emption aforesaid: *And provided further*, That the said commissioners aforesaid shall, before they enter upon their duties as such, be sworn faithfully to discharge their duties according to the provisions of this act; and they shall receive a compensation for their services to be prescribed by the legislature of said Territory: *Provided*, That the whole compensation to said Commissioners shall not exceed the sum of one hundred and twenty dollars.

Proviso.

Proviso.

Commissioners to be sworn and receive compensation.

Proviso.

Approved, June 15, 1844.

June 15, 1844.
Vol. 5, p. 668.

CHAP. 60.—An Act Making appropriations for certain improvements on the western shore of Lake Michigan.

Harbor at Southport (Kenosha), Wis.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of twelve thousand five hundred dollars be, and is hereby appropriated, out of any moneys in the treasury not otherwise appropriated, for the construction of a harbor at the town of Southport [^a], in the Territory of Wisconsin.

Topographical engineers to select location.

SEC. 2. *And be it further enacted*, That the corps of topographical engineers shall select, from actual examination and survey, the point of location of said harbor.

Money to be expended under direction of War Department.

SEC. 3. *And be it further enacted*, That the money hereby appropriated shall be expended under the direction of the War Department.

Approved, June 15, 1844.

June 15, 1844.
Vol. 5, p. 668.

CHAP. 61.—An Act Making appropriations to aid in completing the harbor at Racine, on the western shore of Lake Michigan.

Appropriation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of twelve thousand five hundred dollars be, and is hereby appropriated, to be paid out of any moneys in the treasury not otherwise appropriated, to aid in the completion of a harbor already commenced by the citizens of the town of Racine, at the mouth of Root river, in the Territory of Wisconsin.

To be expended under direction of War Department.

SEC. 2. *And be it further enacted*, That the money hereby appropriated shall be expended under the direction of the War Department.

Approved, June 15, 1844.

^a Now known as Kenosha.

CHAP. 66.—An Act Making appropriation for certain improvements in the Territory of Iowa.

June 15, 1844.
Vol. 5, p. 670.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and they are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction of the Secretary of War.

Appropriations to be expended under direction of Secretary of War.

For the improvement of the harbor at the town of Dubuque, seven thousand five hundred dollars; *Provided*, upon due examination and survey, under the direction of the Secretary of War, it shall appear that a permanent improvement can be accomplished and completed for this amount, so as to admit the landing of steamers of the largest class navigating the river at the town of Dubuque at all seasons of the year.

Dubuque Harbor, Iowa; provided it will make permanent improvement.

* * * * *

Approved, June 15, 1844.

CHAP. 67.—An Act Making appropriations for certain improvements in the Territory of Florida.

June 15, 1844.
Vol. 5, p. 670.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby appropriated for improvements in the Territory of Florida, to be expended under the direction of the Secretary of War, to wit:

To be expended under direction of Secretary of War.

For removal of obstructions to the navigation of the rivers Choctawhatchie, and Holmes, ten thousand dollars;

Choctawhatchie and Holmes rivers.

* * * * *

For connecting the waters of Indian river and Mosquito lagoon, at the Haulover, one thousand five hundred dollars;

Connecting Indian River and Mosquito Lagoon.

For removal of obstructions in the navigation of the river St. Mark's, above its confluence with the Wakulla river, two thousand five hundred dollars.

St. Marks River.

Approved, June 15, 1844.

CHAP. 85.—An Act For the relief of George M. Jones.

June 15, 1844.
Vol. 6, p. 916.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to George M. Jones, or his heirs, the sum of three hundred and twenty dollars, and eighty-nine cents, out of any money in the treasury not otherwise appropriated, being the balance due him on his account of blacksmith work done, and materials furnished to Jonathan

Payment for blacksmith's work, etc., at Nantucket Harbor, Mass.

Prescott, as agent of the United States, for the use of the dredging-machine while at work in removing the bar at Nantucket harbor in eighteen hundred and thirty-two.

Approved, June 15, 1844.

June 15, 1844.
Vol. 6, p. 916.

CHAP. 87.—An Act For the relief of Gervis Foote.

Payment for
delivery of stone
at Barcelona
(Portland), N. Y.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to Gervis Foote, of the State of New York, or his heirs, the sum of eleven hundred and fifty dollars, out of any money in the treasury not otherwise appropriated, being the amount agreed to be paid to him by the agent of the United States, under his contract for the delivery of a certain quantity of stone on the bank of Lake Erie, at Barcelona [^a], in eighteen hundred and thirty-eight, and eighteen hundred and thirty-nine.

Approved, June 15, 1844.

June 15, 1844.
Vol. 6, p. 916.

CHAP. 88.—An Act For the relief of Samuel B. Folger.

Payment for
blacksmith's
work, etc., at
Nantucket Har-
bor, Mass.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to Samuel B. Folger, or his heirs, the sum of five hundred and thirty-six dollars and seventy-four cents, out of any money in the treasury not otherwise appropriated, being the amount of his account of blacksmith work done, and materials furnished to Lieutenant Jonathan Prescott, for the use of the public works at Nantucket harbor, then under his charge as an officer in the engineer service of the United States, during the years eighteen hundred and thirty, eighteen hundred and thirty-one, and eighteen hundred and thirty-two.

Approved, June 15, 1844.

June 15, 1844.
Vol. 6, p. 916.

CHAP. 89.—An Act For the relief of Samuel B. Tuck.

Payment for
coal delivered at
Nantucket Har-
bor, Mass.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay Samuel B. Tuck or his heirs, a just and reasonable price for thirty and nineteen thirty-sixths chaldrons of Virginia coal delivered to Lieutenant Jonathan Prescott, as agent of the United States at Nantucket har-

^a Now known as Portland.

bor, in the year one thousand eight hundred and thirty-two, out of any money in the treasury not otherwise appropriated: *Provided*, The whole amount to be paid under this act shall not exceed the sum of four hundred and twelve dollars and twelve cents.

Proviso.

Approved, June 15, 1844.

CHAP. 105.—An Act Making appropriations for the civil and diplomatic expenses of Government for the fiscal year ending the thirtieth day of June, eighteen hundred and forty-five, and for other purposes.

June 17, 1844.
Vol. 5, p. 681.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

SEC. 2. *And be it further enacted*, That whenever, hereafter, in submitting to Congress the annual estimates from the several Executive Departments of the Government, it shall be found that the usual items of such estimates vary materially in amount from the appropriation ordinarily asked for the object named, and especially from the appropriation granted for the same objects for the year next preceding, and whenever new items not theretofore usual shall be introduced into such estimates for any year, the estimates shall be accompanied by minute and full explanations from the head of the appropriate department, of all such variations and new items, setting forth the reasons and grounds upon which the amounts are required, and the different items added: and whenever any such estimate, whether annual or special, shall ask an appropriation for any new specific expenditure, such as the construction of a fort, the erection of a custom-house, or other public building, or the construction of any other public work requiring a plan before the building or work can be properly completed, every such estimate shall be accompanied by a full plan and detailed estimates of the cost of the whole work; and all subsequent estimates for every such work shall give the original estimated cost, the aggregate amount theretofore appropriated for the same, and the amount actually expended thereupon, as well as the amount asked for the current year for which such estimates shall be made; and whenever any such subsequent estimates shall ask for an appropriation for any such work beyond the original estimate of the cost, the full reasons for the excess, and the extent of the anticipated excess, shall be also stated.

When usual items vary materially in amount from ordinary appropriation for that object, etc.

All estimates for work requiring plan must be accompanied with one.

* . * * *

Approved, June 17, 1844.

Feb. 13, 1845.
Vol. 6, p. 935.

CHAP. 11.—An Act For the relief of Gideon Batchelder and others.

To be paid for
stone for Sandy
Bay breakwater
(Rockport Har-
bor).

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury pay, out of any money in the treasury not otherwise appropriated, such sum as shall be found equitably due to Gideon Batchelder and others, by the proper accounting officer, for any stone delivered in the years one thousand eight hundred and thirty-eight and one thousand eight hundred and thirty-nine, towards the erection of Sandy Bay Breakwater, near Gloucester, Massachusetts, under the inspection and by the assent of the public agent there at that time; the price not to exceed the previous contract price, and none to be paid for which was so delivered after the year one thousand eight hundred and thirty-nine, or which was not suitable for the work, and useful either for its completion or preservation.

Approved, February 13, 1845.

Feb. 26, 1845.
Vol. 6, p. 936.

CHAP. 21.—An Act For the relief of the president and directors of the Dismal Swamp Canal Company.

Authorized to
retain certain
dividends.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the said company are hereby authorized to retain the dividends hereafter to be declared, and now on hand, on eight hundred shares held by the United States in the stock of said canal company, to be applied to refund the principal and interest on thirty-two thousand seven hundred and twelve dollars and thirty-two cents—moneys advanced by said company to complete the work originally undertaken, and partly executed, by the agents of the United States; and that the same be paid to the company before any of the dividends accruing on said stock be paid into the treasury of the United States.

Approved, February 26, 1845.

Mar. 3, 1845.
Vol. 5, p. 731.

CHAP. 42.—An Act To grant certain lands to the State of Indiana, the better to enable the said State to extend and complete the Wabash and Erie Canal from Terre Haute to the Ohio River.

Lands granted
on the Wabash
and Erie Canal.
1827, c. 56; 1834,
c. 137; 1841, c. 12.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Indiana, for the purpose of aiding said State in extending and completing the Wabash and Erie canal from Terre Haute, in the county of Vigo, in said State, to the Ohio river, at Evansville, in said State, as the course thereof has been established and surveyed by the authority of said State, one moiety of the public lands, (remaining unsold, and not otherwise disposed of, encumbered or appropriated,) in a

strip five miles in width on each side of said canal; to be selected by an agent or agents to be appointed by the Governor of said State, subject to the approval of the Secretary of the Treasury of the United States; reserving to the United States each alternate section, (or other proper subdivision of said land,) from one end of said canal to the other; and before the selection, to be made as aforesaid by such agent or agents, shall be deemed to have been made and perfected, a chart or charts, showing the courses and distances and points of termination of said canal, shall be reported, or caused to be reported by the Governor of Indiana, or by some person or persons by him appointed to the Commissioner of the General Land Office.

Lands reserved.

Chart of canal to be reported to General Land Office.

SEC. 2. *And be it further enacted*, That, for the purpose hereinbefore mentioned, there be, and hereby is, granted to the said State, in addition to the grant hereinbefore provided for, one moiety of all the other lands in the Vincennes land district, in said State, and which remain, as aforesaid, unsold, and not otherwise disposed of, encumbered or appropriated, to be selected under the authority and by the direction of the Governor of said State: *Provided*, That, in the selection of the lands by this section provided for, no land shall be comprehended which, in and by the first section of this act, are (in alternate sections or other proper subdivisions) directed to be reserved as aforesaid; and the lands so selected shall be reported, or cause to be reported, by the Governor of said State, to the register of the land office at Vincennes, before such selection shall be deemed to be made and completed.

Lands granted in Vincennes district.

Selection.

Lands selected to be reported to register.

SEC. 3. *And be it further enacted*, That all the lands, by the first and second sections of this act granted as aforesaid, shall, after the selections thereof shall have been made and completed as aforesaid, be subject to be disposed of by the General Assembly of said State, for the purpose aforesaid, and no other; and the President shall direct the further sales of the public lands, in the Vincennes land district aforesaid, to be suspended until the Governor of said State shall have caused the selections aforesaid to be made and perfected as aforesaid, and shall have notified the Secretary of the Treasury thereof: *Provided*, That such suspension shall not continue longer than twelve months from and after the passing of this act.

Disposal of lands granted by secs. 1 and 2 of act.

Sale of lands in Vincennes district suspended.

SEC. 4. *And be it further enacted*, That the said canal when completed, shall be and forever remain a public highway for the use of the Government of the United States, free from any toll or other charge whatever, for any property of the United States, or persons in their service, passing through or along the same; and shall be completed within fifteen years from and after the passing of this act, or the State shall be holden to pay to the United States the amount of the price or prices for which any and all of said land which may have been disposed of by said State may have sold; and such of said lands as may not have been thus disposed of shall, from and after said fifteen

United States to have use of the canal free.

Canal to be completed in 15 years, or land to revert to United States.

Price of lands
limited.

years, if said canal should not then have been completed, revert to and again become the property of the United States: *Provided always*, That it shall not be competent for the said General Assembly to dispose of said lands, or any of them, at a price lower than, for the time being, shall be the minimum price of other public lands.

Approved, March 3, 1845.

Mar. 3, 1845.
Vol. 6, p. 940.

CHAP. 57.—An Act For the relief of Philip Schwartztrawber of Ohio.

To be paid for
taking care of
booms on Red
River.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury is authorized to pay to Philip Schwartztrawber, for his services in taking care of the booms left on Red river by Captains Tyson and Shreve, the sum of two hundred and forty dollars, out of any money in the treasury not otherwise appropriated.

Approved, March 3, 1845.

Mar. 3, 1845.
Vol. 5, p. 743.

CHAP. 63.—An Act Making appropriations for certain fortifications of the United States, for the year ending on the thirtieth of June, eighteen hundred and forty-six.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby appropriated, to be paid out of any unappropriated money in the Treasury for the preservation, repairs, and construction of certain fortifications for the fiscal year beginning on the first day of July, one thousand eight hundred and forty-five, and ending on the thirtieth day of June, one thousand eight hundred and forty-six:

* * * * *

St. Augustine,
Fla.

For completing the sea-wall at St. Augustine, including the transfer of the sum of one thousand one hundred and thirty-three dollars and four cents, being a balance remaining in agent's hands of an appropriation for the repairs of Fort Marion, six thousand four hundred dollars;

* * * * *

Approved, March 3, 1845.

Mar. 3, 1845.
Vol. 5, p. 748.

CHAP. 67.—An Act To continue the harbor improvement already commenced at the town of Southport^a, in the town of Southport, in the Territory of Wisconsin.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of fifteen thousand dollars be, and the same is

^a Now known as Kenosha.

hereby appropriated, out of any money in the treasury not otherwise appropriated, for the purpose of aiding in the completion of the harbor already commenced at the town of Southport, in the Territory of Wisconsin; and that the same be expended under the direction of the War Department.

Approved, March 3, 1845.

CHAP. 73.—An Act Making appropriations for certain improvements in the Territory of Iowa.

Mar. 3, 1845.

Vol. 5, p. 778.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and they are hereby appropriated, out of any money in the Treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the improvement and construction of the following roads in the Territory of Iowa, to wit:

* * * * *

For the improvement of the harbor at the town of Dubuque, in addition to the appropriation of last year, seven thousand dollars.

Harbor at Dubuque, Iowa.

Approved, March 3, 1845.

CHAP. 103.—An Act Granting certain lands to the Territory of Iowa, to aid in the improvement of the navigation of the Des Moines River, in said Territory.

Aug. 8, 1846.

Vol. 9, p. 77.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the Territory of Iowa, for the purpose of aiding said Territory to improve the navigation of the Des Moines river from its mouth to the Racoon Fork, (so called,) in said Territory, one equal moiety, in alternate sections, of the public lands, (remaining unsold, and not otherwise disposed of, encumbered, or appropriated,) in a strip five miles in width on each side of said river; to be selected within said Territory by an agent or agents to be appointed by the governor thereof, subject to the approval of the Secretary of the Treasury of the United States.

Public lands granted to Iowa for improvement of Des Moines River

SEC. 2. *And be it further enacted, That the lands hereby granted shall not be conveyed or disposed of by said Territory, nor by any State to be formed out of the same, except as said improvements shall progress; that is, the said Territory or State may sell so much of said lands as shall produce the sum of thirty thousand dollars, and then the sale shall cease, until the governor of said Territory or State shall certify the fact to the President of the United States, that one-half of said sum has been expended upon said improvement, when the said Territory or State may sell and convey a quantity of the residue of said lands, sufficient to replace the amount expended, and thus the sales shall*

Not to be conveyed or disposed of, except in certain cases.

progress as the proceeds thereof shall be expended, and the fact of such expenditure shall be certified as aforesaid.

Des Moines
River declared
public highway.
1870, c. 7.

SEC. 3. *And be it further enacted*, That the said river Des Moines shall be and forever remain a public highway for the use of the Government of the United States, free from any toll or other charge whatever for any property of the United States, or persons in their service passing through or along the same: *Provided always*, That it shall not be competent for the said Territory or future State of Iowa to dispose of said lands, or any of them, at a price lower than, for the time being, shall be the minimum price of other public lands.

Proviso.

Lands to be-
come property of
Iowa on admis-
sion into Union.

SEC. 4. *And be it further enacted*, That whenever the Territory of Iowa shall be admitted into the Union as a State, the lands hereby granted for the above purpose shall be and become the property of said State, for the purpose contemplated in this act, and no other: *Provided*, The legislature of the State of Iowa shall accept the said grant for the said purpose.

Proviso.

Approved, August 8, 1846.

Aug. 8, 1846.
Vol. 9, p. 83.

CHAP. 170.—An Act To grant a certain quantity of land to aid in the improvement of the Fox and Wisconsin rivers, and to connect the same by a canal, in the Territory of Wisconsin.

Grant of land
to aid in improv-
ing Fox and Wis-
consin rivers.
1849, c. 86.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Wisconsin, on the admission of such State into the Union, for the purpose of improving the navigation of the Fox and Wisconsin rivers, in the Territory of Wisconsin, and of constructing the canal to unite the said rivers, at or near the portage, a quantity of land equal to one-half of three sections in width, on each side of the said Fox river, and the lakes through which it passes, from its mouth to the point where the portage canal shall enter the same, and on each side of said canal from one stream to the other, reserving the alternate sections to the United States, to be selected under the direction of the governor of said State, and such selection to be approved by the President of the United States. The said rivers, when improved, and the said canal, when finished, shall be and forever remain a public highway for the use of the Government of the United States, free from any toll or other charge whatever for the transportation of the mails, or for any property of the United States, or persons in their service passing upon or along the same: *Provided*, The said alternate sections, reserved to the United States, shall not be sold at a less rate than two dollars and fifty cents the acre: *Provided, also*, That no preemptive claim to the lands so reserved shall give the occupant, or any other person claiming through or under him, a right to said lands at any price less than the price fixed in this act, at the time of the settlement on said lands.

United States
to use rivers and
canal free from
toll.

Price of lands.

Preemptive
claim.

SEC. 2. *And be it further enacted*, That as soon as the Territory of Wisconsin shall be admitted as a State into the Union, all the lands granted by this act shall be and become the property of said State for the purpose contemplated in this act, and no other: *Provided*, That the legislature of said State shall agree to accept said grant upon the terms specified in this act; and shall have power to fix the price at which said lands shall be sold, not less than one dollar and twenty-five cents the acre; and to adopt such kind and plan of improvement on said route as the said Legislature shall from time to time determine for the best interest of said State. *Provided, also*, That the lands hereby granted shall not be conveyed or disposed of by said State, except as said improvements shall progress: that is, the said State may sell so much of said lands as shall produce the sum of twenty thousand dollars, and then the sales shall cease until the governor of said State shall certify the fact to the President of the United States, that one-half of said sum has been expended upon said improvements, when the said State may sell and dispose of a quantity of said lands sufficient to reimburse the amount expended; and thus the sales shall progress as the proceeds thereof shall be expended, and the fact of such expenditure certified in the manner herein mentioned.

Lands to become property of Wisconsin.

Legislature to accept grant and fix price of land at not less than \$1.25 per acre.

Limitation on quantities sold.

SEC. 3. *And be it further enacted*, That the said improvement shall be commenced within three years after the said State shall be admitted into the Union, and completed within twenty years, or the United States shall be entitled to receive the amount for which any of said lands may have been sold by said State: *Provided*, That the title of purchasers under the sales made by the State in pursuance of this act shall be valid.

Title of purchasers under act shall be valid.

1867, Res. No. 2.

Approved, August 8, 1846.

CHAP. 175.—An Act Making appropriations for the civil and diplomatic expenses of Government, for the year ending the thirtieth day of June, eighteen hundred and forty-seven, and for other purposes.

Aug. 10, 1846.
Vol. 9, p. 85.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and hereby are, appropriated to the objects hereinafter expressed, for the year ending the thirtieth day of June, eighteen hundred and forty-seven, to be paid out of any unappropriated money in the Treasury, viz.:

Appropriations for year ending June 30, 1847.

* * * * *

Miscellaneous. — * * *

Miscellaneous.

* * * * *

For reducing and preparing for publication, under a resolution of the Senate, plans and drawings, made by the officers of the Topographical Bureau, for the improve-

Preparing for publication plans and drawings.

ment of harbors, rivers, &c., four thousand nine hundred and eighty-eight dollars.

* * * * *

Approved, August 10, 1846.

Mar. 2, 1847.
Vol. 9, p. 149.

CHAP. 35.—An Act Making appropriations for the support of the Army and of Volunteers for the year ending the thirtieth June, one thousand eight hundred and forty-eight, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Deficiencies.

SEC. 2. *And be it further enacted,* That the following sums be, and the same are hereby appropriated, to supply deficiencies in appropriations made for the service of the present fiscal year, under the following heads, viz:

* * * * *

Cape Fear River.

For deficiency of former appropriations for the improvement of Cape Fear river, six hundred and one dollars and ninety-two cents.

Deficiency of appropriation for removing great raft of Red River.
1838, c. 59.

For deficiency of appropriation for removing the great raft of Red river, made by the act approved April twentieth, eighteen hundred and thirty-eight, seven thousand one hundred and fifty dollars, being the amount advanced by Daniel T. Witlee and others, through the branch of the Real Estate Bank of Washington, Arkansas, to Henry M. Shreve, government agent for such removal, and expended by him for that purpose.

Approved, March 2, 1847.

Mar. 3, 1847.
Vol. 9, p. 155.

CHAP. 47.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year ending the thirtieth day of June, one thousand eight hundred and forty-eight, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

Appropriations for year ending June 30, 1848.

the following sums be, and hereby are, appropriated to the objects hereinafter expressed, for the year ending the thirtieth day of June, one thousand eight hundred and forty eight, to be paid out of any unappropriated money in the treasury, namely:

* * * * *

Miscellaneous.

Miscellaneous.— * * *

* * * * *

Swan & Palmer for work done on Ohio River.

To pay Swan and Palmer for work executed by them at "Twin Island," on the River Ohio, above the falls, six thousand four hundred and seventy-nine dollars, and twenty-five cents: *Provided,* The account be first settled by the proper accounting officer of the Treasury Department.

* * * * *

Approved, March 3, 1847.

CHAP. 67.—An Act Giving the consent of Congress to an Act of the general assembly of Virginia authorizing the levy of tolls on the James River.

Mar. 3, 1847.

Vol. 9, p. 204.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress be, and the same is hereby, given to an act passed by the General Assembly of the State of Virginia, on the fifth day of March, eighteen hundred and forty-six, entitled "An act to incorporate a Company to remove the bars in James river between the city of Richmond and Bermuda Hundred," and that the authority as conferred by the said act on the company thereby created, to demand and receive the tolls therein specified on vessels navigating the said river, "on condition only that the same shall have been made navigable in any season at high water from Rochell's Landing, at the city of Richmond, to Bermuda Hundred, in the county of Chesterfield, by vessels drawing eleven feet and an half foot water," be and the same is hereby, sanctioned and confirmed: *Provided, however,* and this assent is given on that express condition, that Congress may, at any time hereafter, repeal or modify the provisions of this act.

Assent of Congress to act of legislature of Virginia authorizing collection of tolls on James River.

Act subject to modification or repeal.

Approved, March 3, 1847.

CHAP. 86.—An Act For the relief of Josiah Haskell.

Mar. 3, 1847.

Vol. 9, p. 696.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay, out of any moneys in the treasury not otherwise appropriated, the sum of six hundred and forty-five dollars and thirty cents to Josiah Haskell, it being in full compensation for his services on the Sandy Bay breakwater, within the Commonwealth of Massachusetts.

Josiah Haskell to be paid \$645.30 for services on Sandy Bay breakwater (Rockport Harbor).

Approved, March 3, 1847.

CHAP. 105.—An Act Making appropriations for certain fortifications of the United States, for the year ending the thirtieth of June, one thousand eight hundred and forty-nine.

July 20, 1848.

Vol. 9, p. 248.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, for the preservation, repairs, and construction of certain fortifications, for the year ending the thirtieth day of June, one thousand eight hundred and forty-nine;

* * * * *

For protection of Great Brewster Island, and security and defence of the principal ship channels into the harbor of Boston, Massachusetts, forty thousand dollars: *Provided,*

Great Brewster Island.
Proviso.

That no portion of said sum of forty thousand dollars shall be expended for the objects aforesaid, until the United States shall procure a good and valid title to so much of said Great Brewster Island as may be necessary to the construction of the proposed fortifications;

* * * * *

Approved, July 20, 1848.

Aug. 11, 1848.

Vol. 9, p. 281.

CHAP. 152.—An Act To authorize the State of Alabama to apply certain lands heretofore granted to that State for internal improvements, for the use of schools in the valueless sixteenth sections in said State.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the lands granted to the State of Alabama for purposes of internal improvement, by the eighth section of the act entitled "An Act to appropriate the proceeds of the sales of the public lands, and to grant preëemption rights," approved September fourth, eighteen hundred and forty-one, may be, and the same are hereby, placed at the disposal of the legislature of said State, at such price as said legislature may direct, to be applied for the use of schools in such townships of said State as in which the sixteenth or school sections are comparatively valueless, and the legislature may locate said lands in any legal subdivisions, not less than forty acres, within the limits of said State.

Approved, August 11, 1848.

Mar. 2, 1849.

Vol. 9, p. 352.

CHAP. 86.—An Act In relation to the Fox and Wisconsin River Reservation, in the State of Wisconsin.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all land entries made in the Green Bay land district, in the State of Wisconsin, upon the odd-numbered sections of the Fox and Wisconsin River reservation, in said State, subsequent to the passage of an act entitled "An Act to grant a certain quantity of land to aid in the improvement of the Fox and Wisconsin Rivers, and connect the same by canal, in the Territory of Wisconsin," approved on the eighth day of August, eighteen hundred and forty-six, be, and the same are hereby, declared to be good and valid as though said act had not been passed: *Provided, nevertheless,* That the governor of said State is hereby authorized to select the same quantity of other lands in lieu thereof; subject, however, to the approval of the President of the United States.

Proviso.

Certain entries in Green Bay land district confirmed. 1846, c. 170.

SEC. 2. *And be it further enacted,* That all similar entries made upon the even-numbered sections of said reservations be also declared to be as good and valid as though said reservation had not been made.

Approved, March 2, 1849.

CHAP. 100.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year ending the thirtieth of June, eighteen hundred and fifty, and for other purposes.

Mar. 3, 1849.
Vol. 9, p. 354.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and hereby are, appropriated out of any money in the treasury not otherwise appropriated, for the objects hereinafter expressed, for the fiscal year ending the thirtieth of June, eighteen hundred and fifty, namely:—

Appropriations
for year ending
June 30, 1850.

* * * * *

Miscellaneous.— * * *

Miscellaneous.

* * * * *

To enable the Secretary of War to execute the survey and examination of the Potomac River, *order* by a resolution of the House of Representatives of the eighth August, eighteen hundred and forty-eight, fifteen hundred dollars.

Survey of Poto-
mac River, \$1,500.

* * * * *

Approved, March 3, 1849.

CHAP. 102.—An Act Making appropriations for certain fortifications of the United States, for the year ending the thirtieth of June, one thousand eight hundred and fifty.

Mar. 3, 1849.
Vol. 9, p. 373.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, for the preservation, repairs, and construction of certain fortifications, for the year ending the thirtieth of June, one thousand eight hundred and fifty:

* * * * *

For repairs of sea-wall, St. Augustine, five thousand dollars.

Sea wall, St
Augustine, Fla.

* * * * *

Approved, March 3, 1849.

CHAP. 144.—An Act For the relief of James Moorehead.

Mar. 3, 1849.
Vol. 9, p. 379.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury is hereby directed and required to pay to James Moorehead, out of any moneys in the treasury not otherwise appropriated, such amount as shall fully compensate and remunerate said Moorehead for all damages and losses sustained by reason of the suspension by the government of the erection of a dam in the Ohio, from a point on Wells Island to a point on the Vir-

Secretary of
Treasury to ascer-
tain and pay
amount of dam-
ages incurred
and losses sus-
tained by James
Moorehead on
account of sus-
pension of erec-
tion of dam in
Ohio River.

Secretary of
Treasury to ex-
amine testimony
in case.

ginia^a shore. But before any payment is made to said Moorehead, the said Secretary shall cause the witnesses, on the part of the said Moorehead, to be cross-examined, and take testimony on behalf of the government, should he deem it proper to do so^b.

Approved, March 3, 1849.

June 5, 1850.
Vol. 9, p. 438.

CHAP. 17.—An Act To continue in force an Act therein mentioned, relating to the port of Baltimore.

Act revived and
to continue in
force until Mar-
ch, 1861.
1800, c. 15.
Act Jan. 19,
1861, c. 11.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act passed the seventeenth day of March, one thousand eight hundred, entitled "An Act declaring the assent of Congress to certain acts of the States of Maryland and Georgia," and which by subsequent acts has been revived and continued in force until the first day of June, one thousand eight hundred and fifty, be, and the same, so far as it relates to the act of the State of Maryland, is hereby revived and continued in force until the third day of March, one thousand eight hundred and sixty one: Provided, That nothing herein contained shall authorize the demand of a duty on tonnage on vessels propelled by steam, employed in the transportation of passengers.

Approved, June 5, 1850.

Sept. 30, 1850.
Vol. 9, p. 523.

CHAP. 90.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year ending the thirtieth of June, eighteen hundred and fifty-one, and for other purposes.

Appropriation
for 1851.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and hereby are, appropriated out of any money in the treasury not otherwise appropriated, for the objects hereinafter expressed, for the fiscal year ending the thirtieth of June, eighteen hundred and fifty-one, namely:—

Miscellaneous.

Miscellaneous.— * * * * *

Survey of delta
of Mississippi
River.

For the topographical and hydrographical survey of the Delta of the Mississippi, with such investigations as may lead to determine the most practicable plan for securing it from inundation, and the best mode of so deepening the passes at the mouth of the river as to allow ships of twenty feet draft to enter the same, fifty thousand dollars.

Approved, September 30, 1850.

^a Now West Virginia.

^b The amount paid by the Treasury Department under this act was \$651.76.

[No. 12.] Joint Resolution Changing the name of St. Peter's River, in Minnesota Territory. June 19, 1852.
Vol. 10, p. 147.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That St. Peters River
to be called Min-
nesota River.
from and after the passage of this act the River in the Territory of Minnesota heretofore known as the Saint Peter's shall be known and designated on the public records as the Minnesota River.

Approved, June 19, 1852.

CHAP. 67.—An Act To authorize the mayor and common council of Chicago, Illinois, to excavate a portion of the public reservation at that place, with a view to the improvement of the navigation of Chicago River. July 21, 1852.
Vol. 10, p. 24.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Chicago au-
thorized to exca-
vate portion of
public reserva-
tion.
the corporate authorities of the city of Chicago, Illinois, be, and they are hereby authorized to excavate such portion of the reservation at Chicago, not exceeding the limits described in their memorial of January five, eighteen hundred and fifty-two, as may be necessary, according to the plan set forth in said memorial, for the improvement of the navigation of the Chicago River.

SEC. 2. *And be it further enacted, That* the Secretary of War be, and he is hereby directed to cause the limits above designated to be marked out, and to make such disposition of the buildings now standing within said limits as may be best for the public interest. Limits desig-
nated by Secre-
tary of War.

Buildings.

Approved, July 21, 1852.

CHAP. 92.—An Act Granting to the State of Michigan the right of way, and a donation of public land for the construction of a ship canal around the falls of St. Mary's, in said State. Aug. 26, 1852.
Vol. 10, p. 35.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Right to locate
canal around
falls of St. Marys
River granted to
Michigan.
there be, and is hereby, granted to said State, the right of locating a canal through the public lands, known as the military reservation at the Falls at St. Mary's River in said State; and that four hundred feet of land in width extending along the line of such canal be, and the same is hereby granted, to be used by said State, or under the authority thereof for the construction and convenience of such canal, and the appurtenances thereto, and the use thereof is hereby vested in said State forever, for the purpose aforesaid, and no other: *Provided*, That in locating the line of said canal through said military reservation, the same shall be located on the line of the survey heretofore made for that purpose, or such other route between the waters above and below said falls, as under the approval of the Secretary of War may be selected. *And provided further*, That said canal shall be at least one hundred feet wide, with a depth of Proviso as to
route.

Size of canal.

water twelve feet, and the locks shall be at least two hundred and fifty feet long, and sixty feet wide.

750,000 acres of land granted to Michigan to enable it to construct canal.

SEC. 2. *And be it further enacted*, That there be, and hereby is granted to the said State of Michigan, for the purpose of aiding said State in constructing and completing said canal, seven hundred and fifty thousand acres of public lands, to be selected in subdivisions, agreeably to the United States surveys, by an agent or agents to be appointed by the Governor of said State, subject to the approval of the Secretary of the Interior, from any lands within said State, subject to private entry.

Lands to be applied to no other use.

SEC. 3. *And be it further enacted*, That the said lands hereby granted, shall be subject to the disposal of the Legislature of said State for the purposes aforesaid and no other; and the said canal shall be, and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the vessels of said government engaged in the public service, or upon vessels employed by said government in the transportation of any property or troops of the United States.

No toll to be charged to United States.

Proceeds of sales of lands to be paid to United States if canal is not commenced within 3 and completed within 10 years.

SEC. 4. *And be it further enacted*, That if the said canal shall not be commenced within three and completed within ten years, the said State of Michigan shall be bound to pay to the United States, the amount which may be received upon the sale of any part of said lands by said State not less than one dollar and twenty-five cents per acre, the title to the purchasers under said State remaining valid.

Accounts to be kept and rendered annually, and until State is fully reimbursed it may charge toll for use of canal, and afterwards only enough to keep it in repair, etc.

SEC. 5. *And be it further enacted*, That the Legislature of said State shall cause to be kept, an accurate account of the sales and net proceeds of the lands hereby granted and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a statement of the same annually to the Secretary of the Interior; and whenever said State shall be fully reimbursed for all advances made for the construction, repairs, and operating of said canal, with legal interest on all advances, until the reimbursement of the same, or upon payment by the United States, of any balance of such advances over such receipts from said lands and canal, with such interest, the said State shall be allowed to tax for the use of said canal, only such tolls as shall be sufficient to pay all necessary expenses for the care, charge, and repairs of the same.

Route of canal to be established and filed before lands can be sold.

SEC. 6. *And be it further enacted*, That before it shall be competent for said State to dispose of any of the lands to be selected as aforesaid, the route of said canal shall be established as aforesaid, and a plat or plats thereof shall be filed in the office of the War Department, and a duplicate thereof, in the office of the Commissioner of the General Land-Office.

Approved, August 26, 1852.

CHAP. 104.—An Act Making appropriations for the improvement of certain harbors and rivers.

Aug. 30, 1852.
Vol. 10, p. 56.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby appropriated, to be paid out of any money in the Treasury not otherwise appropriated, and to be expended under the superintendence of the Secretary of War, for the following purposes, to wit:

For the continuation of the Delaware breakwater, thirty thousand dollars. Delaware.

For the construction of a harbor on the east side of Reedy Island, Port Penn, Delaware, fifty-one thousand and ninety dollars. Reedy Island.

For the repairs of the works at the harbor at Chester, on the Delaware River, five thousand dollars. Chester.

For the removal of obstructions in the Savannah River, at a place called the Wrecks, and the improvement of the navigation of said river, forty thousand dollars. Savannah River.

For continuing the improvement of the navigation of the Hudson River, above and below Albany, and not above Troy, fifty thousand dollars. Hudson River.

For the improvement of the navigation of the Mississippi River, below the rapids, ninety thousand dollars; Missouri, Arkansas, and Ohio rivers.

The Ohio, including the repairs of the dam at Cumberland Island, ninety thousand dollars;

The Missouri, and the Arkansas Rivers, each forty thousand dollars;

And for the construction and repair of snag-boats, dredge-boats, discharging scows and machinery to be used on the Mississippi, Ohio, Missouri, Arkansas, and other western rivers, one hundred and fifty thousand dollars. Snag boats, etc.

For the improvement of the James, and Appomattox Rivers, below the cities of Richmond and Petersburg, forty-five thousand dollars. James and Appomattox rivers.

For the improvement of the Rock River rapids, and the Des Moines rapids in the Mississippi River, at the lower chain and the English chain, one hundred thousand dollars. Mississippi River.

For opening a ship channel of sufficient capacity to accommodate the wants of commerce, through the most convenient pass leading from the Mississippi River into the Gulf of Mexico, seventy-five thousand dollars. And it shall be the duty of the Secretary of War, to apply said moneys to the opening of said ship channel by contract, and at an early day in the next session of Congress to report the progress of the work, the amount necessary to complete it, and an estimate of the annual cost of keeping said channel open, and any contract made shall be limited to the amount hereby appropriated. Ship channel from the Mississippi to Gulf of Mexico.

For removing the raft of Red River, one hundred thousand dollars, and that the Secretary of War be authorized to contract with the lowest responsible bidder within this appropriation, for the removal of said raft after reasonable public notice. Red River raft.
Res. Jan. 7, 1853.

- Colorado River. For the improvement of the navigation of the Colorado River, Texas, twenty thousand dollars.
- Trinity River. For the survey of the Trinity River, Texas, including the bar at the mouth, three thousand dollars.
- Breakwaters. For a breakwater at Richmond Island harbor, and repairing the breakwater in Portland harbor, Maine, ten thousand dollars.
- Cobscook Bay. For removing the rocks obstructing the navigation near Falls Island, Cobscook Bay, Maine, five thousand dollars.
- Survey at Matinicus. For a survey in reference to the construction of a breakwater on the eastern side of the Island of Matinicus, Maine, one thousand dollars.
- Great Brewster Island. For the protection of Great Brewster Island, in the harbor of Boston, thirty thousand dollars.
- Cape Cod Harbor. For the preservation of Cape Cod harbor, at and near Provincetown, Massachusetts, five thousand dollars.
- Hyannis. For repairing the breakwater at Hyannis Harbor, Massachusetts, five thousand dollars.
- Great Woods Hole Harbor. For the preservation of Great Woods Hole harbor, two thousand five hundred dollars.
- Survey at East Dennis. For a survey in reference to the construction of a breakwater at East Dennis, Barnstable Bay, Massachusetts, one thousand five hundred dollars.
- Plymouth beach. For repairing the injuries done to the government works on Plymouth beach, in the great storm of eighteen hundred and fifty-one, five thousand dollars.
- Survey at Scituate. For a survey in reference to the improvement of the harbor of Scituate, in connection with the North River, Massachusetts, one thousand dollars.
- New Haven. For the removal of Middle Rock, designated on the chart as Rocky Buoy, in the harbor of New Haven, Connecticut, six thousand dollars.
- Seekonk (Pawtucket) River. For removing a rock near the mouth of the Seekonk River^a, harbor of Providence, Rhode Island, five thousand dollars.
Res. Jan. 20, 1853.
- New York Harbor. For the further improvement of the harbor of New York, by removing the rocks at Hell Gate and Diamond Reef, in the East River, twenty thousand dollars.
- Port Jefferson. For a survey of the harbor of Port Jefferson, New York, with reference to the improvement thereof, twelve hundred dollars.
- Newark Bay. For the removal of the bar at the junction of the Passaic and Hackensack rivers, in Newark Bay, New Jersey, ten thousand dollars.
- Cranberry Inlet. For the survey of Cranbury Inlet, Barnegat Bay, New Jersey, in reference to its improvement, one thousand dollars.
- Patapsco River. For the improvement of the Patapsco River, from Fort McHenry to the mouth of said river, twenty thousand dollars.

^a The records of this office credit this appropriation to Providence River.

For the construction of a steam-dredge, equipment and discharging scows, for the waters of the Chesapeake Bay and the Atlantic coast, twenty thousand dollars. Steam dredge, etc.

For removing obstructions at the mouth of the Susquehanna River, near Havre-de-Grace, Maryland, ten thousand dollars. Susquehanna River.

For reopening a communication between Albemarle Sound, North Carolina, and the Atlantic Ocean, by the construction of a breakwater^a across Croatan Sound, fifty thousand dollars. Breakwater across Croatan Sound. 1855, c. 103.

For completing the improvement of the harbor of Washington, North Carolina, five thousand dollars. Washington Harbor, N. C.

For the improvement of the harbor of Charleston, South Carolina, fifty thousand dollars. Charleston.

For the improvement of the harbor of Mobile, Alabama, at Dog River Bar and the Choctaw Pass, fifty thousand dollars. Mobile.

For a survey in reference to the removal of obstructions to the navigation of Bayou La Fouché, Louisiana, two thousand five hundred dollars. Bayou La Fouché.

For the construction of a harbor on Lake Pontchartrain, near the city of New Orleans, twenty-five thousand dollars. Lake Pontchartrain.

* * * * *

For the improvement of the harbor of Manitowoc, Wisconsin, eight thousand dollars. Manitowoc Harbor.

For the improvement of the harbor of Sheboygan, Wisconsin, ten thousand dollars. Sheboygan. Res. No. 3, 1856.

For continuing the improvement of the harbor of Racine, Wisconsin, ten thousand dollars. Racine.

For continuing the improvement of the harbor of Milwaukee, Wisconsin, fifteen thousand dollars, to be expended at the point on the Milwaukee River known as the "North Cut," surveyed by Lieutenant Centre. Milwaukee.

For continuing the improvement of the harbor of Kenosha, (formerly South Port,) Wisconsin, ten thousand dollars. Kenosha.

For continuing the improvement of the harbor of Chicago, Illinois, twenty thousand dollars. Chicago.

For continuing the improvement of the harbor of Michigan city, Indiana, or the laying down of a floating breakwater and safety anchorage, as the Secretary of War may determine, twenty thousand dollars. Michigan City.

For the improvement of the harbor of New Buffalo, Michigan, eight thousand dollars. New Buffalo.

For continuing the improvement of the harbor of St. Joseph, Michigan, ten thousand dollars. St. Joseph Mich.

^a So much of this paragraph as prescribes a breakwater is repealed by act approved February 14, 1855. The approved plans of the Department, proposed early in 1853, provided for excavating a channel from Roanoke Sound to the ocean, across Bodie Island, east of Roanoke Island.

Black Lake (Holland) Harbor.	For the improvement of Black Lake harbor, Michigan, eight thousand dollars.
Grand River (Grand Haven Harbor).	For the preservation of the harbor at the mouth of Grand River, Michigan, two thousand dollars.
Clinton River.	For the improvement of the harbor at the mouth of Clinton River, Michigan, five thousand dollars.
St. Clair flats.	For the improvement of the navigation of the Saint Clair Flats, connecting the upper and lower lakes, twenty thousand dollars.
River Raisin (Monroe Harbor).	For completing the improvement of the River Raisin harbor, Michigan, fourteen thousand dollars.
Steam dredge on Lake Michigan.	For constructing a steam-dredge, equipment and discharging scows for Lake Michigan, twenty thousand dollars.
Sandusky Harbor.	For preserving the harbor of Sandusky city, and improving the same, fifteen thousand dollars.
Black River (Lorain Harbor).	For continuing the improvement of the harbor at the mouth of Black River, on Lake Erie, Ohio, five thousand dollars.
Cleveland.	For continuing the improvement of the harbor of Cleveland, Ohio, thirty thousand dollars.
Fairport, Ohio.	For the further improvement of the harbor of Fairport, at the mouth of Grand River, Ohio, ten thousand dollars.
Ashtabula.	For continuing the improvement of the harbor of Ashtabula, Ohio, ten thousand dollars.
Erie, Pa.	For continuing the improvement of the harbor of Erie, Pennsylvania, thirty thousand dollars.
Dunkirk.	For continuing the improvement of the harbor of Dunkirk, New York, thirty thousand dollars.
Buffalo.	For repairing the sea-wall at the harbor of Buffalo, New York, fourteen thousand dollars.
Steam dredge on Lake Erie.	For constructing a steam-dredge, equipment and discharging scows for Lake Erie, twenty thousand dollars.
Oak Orchard Creek Harbor.	For continuing the improvement of the harbor of Oak Orchard Creek, Lake Ontario, New York, ten thousand five hundred dollars.
Genesee River (Charlotte Harbor).	For continuing the removal of obstructions in the harbor at the mouth of the Genesee River, Lake Ontario, New York, twenty thousand dollars.
Little Sodus Bay.	For the improvement of the harbor of Sodus Bay ^a , Lake Ontario, Cayuga county, New York, ten thousand dollars.
Oswego.	For continuing the improvement of the harbor of Oswego, Lake Ontario, New York, forty thousand dollars.
Steam dredge on Lake Ontario.	For constructing a steam-dredge, equipment, and discharging scows for Lake Ontario, twenty thousand dollars.
Rappahannock River.	For a survey of the Rappahannock River, Virginia, three thousand dollars.
Taunton River and New Bedford Harbor.	For a survey of Taunton River and New Bedford harbor, Massachusetts, three thousand dollars.

^a Refers to Little Sodus Bay.

For improving the Kennebec River from the United States Arsenal wharf, in Augusta, Maine, to Lovejoy's Narrows, six thousand dollars. Kennebec River.

For a survey of San Antonio River, Texas, one thousand five hundred dollars. San Antonio River.

For surveys of the harbors at Sabine, Galveston, Paso Cavallo, Velasco, Brazos de Santiago, and Corpus Christi, and the rivers Sabine, Brazos, and Trinity, Texas, five thousand dollars. Harbors in Texas.

For repairing the public works at Little Egg Harbor, New Jersey, eight thousand five hundred dollars. Little Egg Harbor.

For a survey of East Pascagoula River, Mississippi, five thousand dollars. East Pascagoula River.

For a survey of Providence harbor, Rhode Island, fifteen hundred dollars. Providence.

For a survey and examination of the falls of the Ohio River, by a board of topographical and civil engineers to be appointed by the Secretary of War, to report upon the expediency of an additional canal around said falls, and the comparative cost, advantages, and disadvantages of making such additional canal on the Kentucky and Indiana shores of said river respectively, and also the cost, advantages, and disadvantages of enlarging and extending the present canal so as to avoid the rocks at Sandy Island; retaining the present locks in their present condition, five thousand dollars. Survey of Falls of the Ohio. Board to be constituted and to report.

For the repair of the sea-wall at Marblehead, Massachusetts, five hundred dollars. Marblehead.

For a survey of the harbor of Georgetown, South Carolina, three thousand dollars. Georgetown, S. C.

For a survey of Shrewsbury River, New Jersey, fifteen hundred dollars. Shrewsbury River.

For repairing the piers at Kennebunk, Maine, seven thousand five hundred dollars. Kennebunk.

For a breakwater at Owlshead harbor, or at Rockland harbor, in Maine, as the Department of War shall decide, fifteen thousand dollars. Breakwater in Maine.

For the further removal of obstructions and the improvement of the harbor of Dubuque, Iowa, fifteen thousand dollars. Dubuque.

For repairing the piers in Great Sodus Bay, New York, ten thousand dollars. Great Sodus Bay.

For improving Cape Fear River at and below Wilmington, North Carolina, twenty thousand dollars. Cape Fear River.

For repairing the piers at Huron River harbor, Ohio, ten thousand dollars. Huron River.

For continuing and repairing the breakwater at Burlington, Vermont, ten thousand dollars. Burlington, Vt.

For repairing the piers at Conneaut, Ohio, ten thousand dollars. Conneaut, Ohio.

For repairing the piers and for improving the harbor at New Castle, Delaware, fifteen thousand dollars. Newcastle, Del.

- Bridgeport, Conn. For the further improvement of the harbor at Bridgeport, Connecticut, ten thousand dollars.
- St. Johns River, Fla. For the improvement of the river Saint John, Florida, ten thousand dollars.
- Ship canal across Florida. For the completion of the old line of survey, or new line, as may be deemed expedient, for a ship canal across the peninsula of Florida, twenty thousand dollars.
- Newark Bay. For a survey of the sand bars in Newark Bay, New Jersey, two thousand dollars.
- Levee across the San Diego. For building a levee across the mouth of the river San Diego, in the State of California, to turn it into its former channel, into False Bay, thirty thousand dollars, to be expended under the direction of the Secretary of War.
- Ogdensburg. For a survey of the harbor of Ogdensburg, New York, with reference to its improvement, three thousand dollars.
- Steam dredge on Lake Champlain. For constructing a steam-dredge, equipment, and discharging scows for Lake Champlain, and improving the navigation thereof, twenty thousand dollars.
- Miscellaneous. For connecting the waters of the Indian River, and Mosquito lagoon, at the Haulover, Florida, five thousand dollars.
- For the repairs, preservation, and contingencies of the harbor works on the Atlantic coast, ten thousand dollars.
- For repairs and contingencies of harbors and rivers and to meet charges for transportation of officers and for fuel and quarters, the payment of which is no longer made by the Quartermaster's Department, and for extra allowance to meet extra expenses under the special direction of the Secretary of War, ten thousand dollars.
- Tennessee and Illinois rivers. 1860, c. 114. For the improvement of the navigation of the Tennessee River, fifty thousand dollars, in conformity with the estimates of the War Department of the thirteenth July, eighteen hundred and fifty-two, and for the improvement of the navigation of the Illinois River, the sum of thirty thousand dollars.
- Waukegan, Ill. For the improvement of the harbor and breakwater at Waukegan, Illinois, fifteen thousand dollars.
- Surveys in Georgia. That the Secretary of War cause to be examined and surveyed the rivers Savannah, from the city of Savannah, as high up as the city of Augusta, the Ockmulgee up to Macon, and the Flint up to Albany, and the Chattahoochee up to Columbus, in the State of Georgia, and to report to Congress the amount of money which may remove any obstructions to navigation, and that the sum of ten thousand dollars be appropriated for that purpose.
- St. Augustine. For filling in behind the United States sea-wall in the harbor of St. Augustine, Florida, with earth, three thousand dollars.

Approved, August 30, 1852.

CHAP. 110.—An Act Making appropriations for the support of the Army, for the year ending the thirtieth of June, one thousand eight hundred and fifty-three. Aug. 31, 1852.
Vol. 10, p. 105.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the support of the army for the year ending the thirtieth of June, one thousand eight hundred and fifty-three.

* * * * *

For continuing the topographical and hydrographical survey of the Delta of the Mississippi, with such investigations as may lead to determine the most practicable plan for securing it from inundation, fifty thousand dollars.

* * * * *

Survey of Mississippi Delta.
1854, c. 267.

Approved, August 31, 1852.

[No. 3.] A Resolution Explanatory of the Act appropriating money for the removal of the raft of Red River. Jan. 7, 1853.
Vol. 10, p. 260.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the act entitled "An act making appropriations for the improvement of certain harbors and rivers," approved August thirtieth, eighteen hundred and fifty-two, as relates to Red River, be so construed as to authorize the Secretary of War to award the contract for the removal of obstructions to the navigation of said river occasioned by the Raft, to the person or persons who, for the amount of the appropriation, will agree to remove said obstructions, and keep said navigation free from the same for the longest period of time; said contract to be awarded after reasonable public notice.

Removal of Red River raft.
1852, c. 104.
1854, c. 267, §5.

Approved, January 7, 1853.

[No. 8.] A Resolution Explanatory of the appropriation for the improvement of the mouth of the Sekonk River and harbor of Providence, Rhode Island. Jan. 20, 1853.
Vol. 10, p. 261.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the clause in the "Act making appropriations for the improvement of certain harbors and rivers," approved thirtieth of August, eighteen hundred and fifty-two, making an appropriation "for removing a rock near the mouth of the Sekonk River^a, harbor of Providence, Rhode Island," be construed to authorize the removal of any rock or other obstructions at the crook or the entrance or mouth of Sekonk River, harbor of Providence, and State of Rhode Island.

Removal of obstructions in Sekonk (Paw-tucket) River.

Act Aug. 30, 1852, c. 104.

Approved, January 20, 1853.

^a The records of this office credit the appropriation for this item to Providence River.

Mar. 3, 1853.

Vol. 10, p. 181.

CHAP. 96.—An Act To supply deficiencies in the appropriations for the service of the fiscal year ending the thirtieth of June, one thousand eight hundred and fifty-three.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated to supply deficiencies in the appropriations for the service of the fiscal year ending the thirtieth of June, eighteen hundred and fifty-three, out of any money in the Treasury not otherwise appropriated, namely:

* * * * *

Genesee River
(Charlotte Har-
bor).

For*improvement of the Genesee River, one hundred and seventy-six dollars and ten cents.

Cleveland.

For removing obstructions at harbor of Cleveland, Ohio, one hundred and forty-five dollars and sixty-nine cents.

Buffalo Creek.

For sea-wall at Buffalo Creek, three hundred and forty nine dollars and five cents.

Ashtabula.

For harbor at Ashtabula, Ohio, forty-two dollars and sixty-four cents.

Milwaukee.

For harbor at Milwaukee, Wisconsin, one hundred and sixty-three dollars and ninety-four cents.

* * * * *

Approved, March 3, 1853.

Mar. 3, 1853.

Vol. 10, p. 189.

CHAP. 97.—An Act Making appropriations for the civil and diplomatic expenses of Government for the year ending the thirtieth of June, eighteen hundred and fifty-four.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be and are hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the objects hereafter expressed, for the fiscal year ending the thirtieth of June, eighteen hundred and fifty-four, namely:

* * * * *

Survey of the coast.— * * *

* * * * *

Survey of com-
munication be-
tween Lake Hu-
ron and the falls
of St. Marys Riv-
er, Mich.

For continuing the survey of the northern and north-
western lakes, including Lake Superior, fifty thousand
dollars: *Provided,* That a survey of so much of the com-
munication between Lake Huron and the Sault Ste. Marie
as may be necessary to ascertain what part thereof requires
to be deepened, shall be made without delay, and plans and
estimates of the nature and expense of the work shall be
laid before Congress at its next session.

* * * * *

Approved, March 3, 1853.

CHAP. 102.—An Act Making further appropriation for the improvement of the Cape Fear River, North Carolina.

July 22, 1854.
Vol. 10, p. 307.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred and forty thousand dollars be, and the same is hereby, appropriated for the year ending thirtieth June, eighteen hundred and fifty-five, to be paid out of any money in the treasury not otherwise appropriated, and to be expended under the superintendence of the Secretary of War, for the continuation of the improvement of the Cape Fear River, North Carolina, at or near its communication with the ocean.

Appropriation
for year ending
June 30, 1855.

How expended

Approved, July 22, 1854.

CHAP. 200.—An Act To authorize the State of Wisconsin to select the residue of the lands to which she is entitled under the Act of eighth of August, eighteen hundred and forty-six, for the improvement of the Fox and Wisconsin rivers.

Aug. 3, 1854.
Vol. 10, p. 345.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Governor of the State of Wisconsin is hereby authorized to cause to be selected the balance of the land to which that State is entitled under the provisions of the act of the eighth August, eighteen hundred and forty-six, granting land to aid the Territory of Wisconsin in the improvement of the Fox and Wisconsin Rivers and to connect the same by a canal, out of any of the unsold public lands in said State, subject to private entry at one dollar and twenty-five cents per acre, and not claimed by preëmption; the quantity to be ascertained upon the principles which governed the final adjustment of the grant to the State of Indiana for the Wabash and Erie Canal, under the provisions of the act of Congress approved the ninth of May, eighteen hundred and forty-eight.

Selection of
balance of land
granted by act of
1846, c. 170.

Res. of Mar. 3,
1855, No. 24.

1848, c. 36.

Approved, August 3, 1854.

CHAP. 267.—An Act Making appropriations for the support of the Army for the year ending the thirtieth of June, one thousand eight hundred and fifty-five.

Aug. 5, 1854.
Vol. 10, p. 576.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated out of any money in the treasury not otherwise appropriated, for the support of the army for the year ending the thirtieth of June, one thousand eight hundred and fifty-five:

* * * * *

SEC. [5.] *And be it further enacted, That the joint resolution entitled "A resolution explanatory of the act appropriating money for the removal of the raft of Red River,"*

Removal of Red
River raft.
1853, res. No. 3.

approved January seventh, eighteen hundred and fifty-three, be and is hereby repealed, and that the Secretary of the Department of War be authorized to expend the appropriation in reference to the Red River raft, in such way, and for such purposes as he may approve, having in view the improvement of the navigation of Red River, in and around the said raft.

Survey of delta
of Mississippi
River.
1852, c. 110.

* * * * *

SEC. 2. [8.] *And be it further enacted,* That of the appropriation of fifty thousand dollars "for continuing the topographical and hydrographical survey of the Delta of the Mississippi, with such investigations as may lead to determine the most practicable plan for securing it from inundation," approved August thirty-first, one thousand eight hundred and fifty-two, the sum of five thousand dollars may be applied, under the special direction of the Secretary of War, to the payment of any expenses connected with said survey and investigations, incurred prior to the first of July, one thousand eight hundred and fifty-two.

* * * * *

Approved, August 5, 1854.

Feb. 14, 1855.
Vol. 10, p. 608.

CHAP. 103.—An Act To amend "An Act making appropriations for the improvement of certain harbors and rivers," approved August thirtieth, eighteen hundred and fifty two.

Act 1852, c. 104,
amended.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the section reading as follows: "For reopening a communication between Albemarle Sound, North Carolina, and the Atlantic Ocean, by the construction of a breakwater across Croatan Sound, fifty thousand dollars," be amended by striking out the words "by the construction of a breakwater across Croatan Sound[^a]."

Approved, February 14, 1855.

Mar. 2, 1855.
Vol. 10, p. 858.

CHAP. 149.—An Act For the relief of John R. Bowes, agent in charge of the property of the United States at Michigan City, in the State of Indiana, and of Isaac S. Smith, of the city of Buffalo, New York.

John R. Bowes
to be paid for care
of public prop-
erty at Michigan
City.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the proper accounting officers of the treasury be, and are hereby, authorized and directed to pay to John R. Bowes, of the State of Indiana, agent in charge of the property of the United States at Michigan City, in said State, the sum of four hundred and seventy dollars and thirty-three

^a The approved plans of the Department, proposed early in 1853, provided for excavating a channel from Roanoke Sound to the ocean, across Bodie Island, east of Roanoke Island.

cents, in payment and in full discharge of all claims of said Bowes against the United States for services as said agent.

SEC. 2. *And be it further enacted*, That the Secretary of the Treasury be, and he is hereby, authorized and directed to pay, out of any money in the treasury not otherwise appropriated, to Isaac S. Smith, the sum of four hundred and fifty-two dollars and thirty-two cents, in full for his account for care and charge of the public property at the city of Buffalo, up to the thirtieth day of April, eighteen hundred and fifty-three, under the direction of the Topographical Bureau.

Isaac S. Smith
to be paid for care
of public prop-
erty at Buffalo.

Approved, March 2, 1855.

CHAP. 170.—An Act To appropriate money to remove the obstructions in the Savannah River, below the city of Savannah, in the State of Georgia.

Mar. 3, 1855.
Vol. 10, p. 640.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred and sixty-one thousand dollars be, and the same is hereby, appropriated out of any money not heretofore appropriated, to remove the obstructions in the Savannah River, below the city of Savannah, in the State of Georgia, placed there during the revolutionary war, for the common defence.

Appropriation
to remove ob-
structions in Sa-
vannah Harbor.
1856, c. 82.

Approved, March 3, 1855.

CHAP. 175.—An Act Making appropriations for the civil and diplomatic expenses of Government, for the year ending the thirtieth of June, eighteen hundred and fifty-six, and for other purposes.

Mar. 3, 1855.
Vol. 10, p. 643.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the treasury not otherwise appropriated, for the objects hereafter expressed, for the fiscal year ending the thirtieth of June, one thousand eight hundred and fifty-six, namely:—

* * * * *

SEC. 10. *And be it further enacted*, * * *

* * * * *

And one thousand six hundred and ninety-six dollars and fifteen cents to supply a deficiency in the appropriation for building four steam dredge boats, in use by the War Department, on Lakes "Champlain," "Erie," "Michigan," and Ontario, to be applied for materials, machinery, tools, and labor furnished in painting said boats.

Deficiency ap-
propriation for
steam dredge
boats on lakes.

* * * * *

Approved, March 3, 1855.

Mar. 3, 1855.
Vol. 10, p. 867.

CHAP. 197.—An Act For the relief of L. R. Lyon, and Dean S. Howard, of the State of New York.

Payment to Lyon & Howard for dredging machine.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury of the United States cause to be paid to L. R. Lyon, and Dean S. Howard, late partners under the name and style of Lyon and Howard, of the State of New York, or to their legal representatives, out of any money in the treasury not otherwise appropriated, the sum of eight thousand six hundred and seventeen dollars, and eighty-one cents, in full for the balance due them for constructing a dredging machine at Whitehall, New York, under contract entered into on the second day of November, eighteen hundred and thirty-six; and a dredging machine to be delivered at Monroe, in the State of Michigan, by contract entered into on the fifteenth of October, eighteen hundred and thirty-six.

Approved, March 3, 1855.

Mar. 3, 1855.
Vol. 10, p. 724.

[No. 24.] A Resolution Explanatory of an Act passed August third, eighteen hundred and fifty-four.

Construction of act 1854, c. 200, respecting grant of land to Wisconsin.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That it was the intention of the act of Congress, approved August third, eighteen hundred and fifty-four, and the same shall be construed, to give to Wisconsin in aid of the improvement of the navigation of the Fox and Wisconsin Rivers, a quantity of land, equal mile for mile of its improvement to that granted to Indiana, under the provisions of the Act of Congress approved May the ninth, eighteen hundred and forty-eight.

Approved, March 3, 1855.

May 12, 1856.
Vol. 11, p. 144

[No. 8.] Joint Resolution Relating to the appropriation for the improvement of the harbor at Sheboygan, Wisconsin.

Preamble.
1852, c. 104.

Whereas, by act of Congress entitled "An act making appropriations for the improvement of certain harbors and rivers," approved August thirtieth, eighteen hundred and fifty-two, the sum of ten thousand dollars was appropriated for the improvement of the harbor of Sheboygan, Wisconsin; and whereas, the city and county of Sheboygan have from time to time made appropriations for the improvement of said harbor to the amount of fifty thousand dollars, to be expended by commissioners appointed by said State; and whereas it is desirable that said appropriations should be expended under one direction, therefore—

Improvement of Sheboygan Harbor.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That after the Secretary of War shall have settled and paid all just

charges existing against the said appropriation of ten thousand dollars, the balance thereof, together with all tools, implements, materials, and other property whatsoever, belonging to the United States and used in improving the said harbor, shall be transferred and turned over by the said Secretary of War to the commissioners for the improvement of the said harbor, appointed by the State of Wisconsin; *Provided*, That the said commissioners shall first give satisfactory security to the Secretary of War for the faithful expenditure of the money in the improvement of the said harbor.

Provido.

Approved, May 12, 1856.

CHAP. 54.—An Act To remove obstructions to navigation in the mouth of the Mississippi River, at the Southwest Pass and Pass a l'Outre.

July 8, 1856.

Vol. 11, p. 24.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the opening and keeping open ship channels of sufficient capacity to accommodate the wants of commerce through the Southwest Pass and Pass a l'Outre, leading from the Mississippi River into the Gulf of Mexico, the sum of three hundred and thirty thousand dollars be, and the same is hereby appropriated, to be paid out of any money in the treasury not otherwise appropriated, and to be expended under the superintendence of the Secretary of War.

Appropriation to remove obstructions in Mississippi at Southwest Pass and Pass a l'Outre.

SEC. 2. *And be it further enacted*, That it shall be the duty of the Secretary of War to apply said moneys to the opening and keeping open of the aforesaid ship channel by contract, and at an early day in the next session of Congress to report the progress of the work, the amount necessary to complete it, and an estimate of the annual cost of keeping said channels open; and any contract made shall be limited to the amount hereby appropriated.

Contract to be made.

Report thereon.

IN THE SENATE OF THE UNITED STATES,

July 7th, 1856.

The President of the United States having returned to the Senate, in which it originated, the bill entitled "An act to remove obstructions to navigation in the mouth of the Mississippi River, at the Southwest Pass and the Pass a l'Outre," with his objections thereto, the Senate proceeded, in pursuance of the Constitution, to reconsider the same; and

Assent of Senate.

Resolved, That the said bill do pass, two-thirds of the Senate agreeing to pass the same.

Attest:

ASBURY DICKINS,
Secretary of the Senate.

IN THE HOUSE OF REPRESENTATIVES
OF THE UNITED STATES,

July 8th, 1856.

Assent of
House.

The House of Representatives having been notified by the Senate that the bill entitled "An act to remove obstructions to navigation in the mouth of the Mississippi River, at the Southwest Pass and the Pass a l'Outre," had been returned by the President with his objections to the Senate, in which it originated, and that the Senate having proceeded, in pursuance of the Constitution, to reconsider the same, had "Resolved, that the said bill do pass, two thirds of the Senate agreeing to pass the same," the House of Representatives proceeded, in pursuance of the Constitution, to reconsider the said bill; and

Resolved, That the said bill do pass, two thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. CULLOM,
Clerk House of Reps.

July 8, 1856.
Vol. 11, p. 25.

CHAP. 55.—An Act Making an appropriation for deepening the channel over the flats of the St. Mary's River, in the State of Michigan.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred thousand dollars be, and the same is hereby appropriated towards deepening the channel of the St. Mary's River, in the State of Michigan, by the west channel through Lake George, according to the estimate of Captain Macomb, of the topographical corps, communicated to the Senate in the report of the Secretary of War, dated January eighteen, eighteen hundred and fifty-five: *Provided*, That the dredging machine purchased for the improvement of the St. Clair flats may be employed, when not required therefor, at the discretion of the Secretary of War, in the improvement of the St. Mary's River or strait.

Appropriation
to deepen chan-
nel in St. Marys
River, Mich.

Res. No. 23,
June 9, 1858.

Steam dredge.

IN THE SENATE OF THE UNITED STATES,

July 7th, 1856.

The President of the United States having returned to the Senate, in which it originated, the bill entitled "An act making an appropriation for deepening the channel over the flats of the St. Mary's River in the State of Michigan," with his objections thereto, the Senate proceeded, in pursuance of the Constitution, to reconsider the same; and

Resolved, That the said bill do pass, two thirds of the Senate agreeing to pass the same.

Attest:

ASBURY DICKINS,
Secretary of the Senate.

IN THE HOUSE OF REPRESENTATIVES
OF THE UNITED STATES,
July 8th, 1856.

The House of Representatives having been notified by the Senate that the bill entitled "An act making an appropriation for deepening the channel over the flats of the St. Mary's River, in the State of Michigan," had been returned by the President, with his objections, to the Senate, in which it originated, and that the Senate, having proceeded, in pursuance to the Constitution, to reconsider the same, had "Resolved, That the said bill do pass, two thirds of the Senate agreeing to pass the same," the House of Representatives proceeded, in pursuance of the Constitution, to reconsider the said bill; and

Resolved, That the said bill do pass, two thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. CULLOM,
Clerk House of Reps.

CHAP. 56.—An Act Making an appropriation for deepening the channel over St. Clair flats, in the State of Michigan.

July 8, 1856.
Vol. 11, p. 25.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of forty-five thousand dollars be and the same is hereby appropriated for the purpose of deepening the channel over the St. Clair flats, in the State of Michigan.

Appropriation
to deepen chan-
nel over St. Clair
flats, Mich.

IN THE SENATE OF THE UNITED STATES,
July 7th, 1856.

The President of the United States having returned to the Senate, in which it originated, the bill entitled "An act making an appropriation for deepening the channel over the St. Clair flats, in the State of Michigan," with his objections thereto, the Senate proceeded, in pursuance of the Constitution, to reconsider the same; and

Resolved, That the said bill do pass, two-thirds of the Senate agreeing to pass the same.

Attest:

ASBURY DICKINS,
Secretary of the Senate.

IN THE HOUSE OF REPRESENTATIVES
OF THE UNITED STATES,
July 8th, 1856.

The House of Representatives having been notified by the Senate that the bill entitled "An act making an appropriation for deepening the channel over the St. Clair flats, in the State of Michigan," had been returned by the President, with his objections to the Senate, in which it originated, and that the Senate, having proceeded, in pursuance of the Constitution, to reconsider the same, had "Resolved, That the said bill do pass, two-thirds of the Senate agreeing to pass the same," the House of Repre-

sentatives proceeded, in pursuance of the Constitution, to reconsider the said bill; and

Resolved, That the said bill do pass, two thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. CULLOM,
Clerk House of Reps.

Aug. 7, 1856.
Vol. 11, p. 30.

CHAP. 82.—An Act To alter and amend “An Act to appropriate money to remove obstructions in the Savannah River, below the city of Savannah, in the State of Georgia,” approved March third, eighteen hundred and fifty-five.

Application of
balance of appro-
priation of 1855,
c. 170, for remov-
ing obstructions
in Savannah Har-
bor.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the balance of the unexpended appropriation made by the act of third March, eighteen hundred and fifty-five, “for removing certain obstructions in the Savannah River,” may be, and is hereby authorized to be applied, under the direction of the Secretary of War, to remove the bars, shoals, banks, and other impediments in said river, caused by said obstructions, as proposed in the project of the commissioners, approved by the War Department in February, eighteen hundred and fifty-three.

Approved, August 7, 1856.

Aug. 16, 1856.
Vol. 11, p. 44.

CHAP. 121.—An Act For the improvement of the navigation of the Patapsco River, and to render the port of Baltimore accessible to the war steamers of the United States.

Appropriation
for deepening
channel of
Patapsco River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred thousand dollars be, and the same is hereby appropriated, out of any money in the treasury not otherwise appropriated, to be expended, under the direction of the Secretary of War, in deepening the channel of the Patapsco River, and in rendering the port of Baltimore accessible to the steam frigates and other war vessels of the United States.

IN THE SENATE OF THE UNITED STATES,
August 16th, 1856.

The President of the United States, having returned to the Senate, in which it originated, the bill entitled “An act for the improvement of the navigation of the Patapsco River, and to render the port of Baltimore accessible to the war steamers of the United States,” with his objections thereto, the Senate proceeded, in pursuance of the constitution, to reconsider the same; and *Resolved*, That the said bill do pass, two-thirds of the Senate agreeing to pass the same.

Attest:

ASBURY DICKINS,
Secretary.

IN THE HOUSE OF REPRESENTATIVES
OF THE UNITED STATES,
August 16th, 1856.

The House of Representatives having been notified by the Senate that the bill entitled, "An act for the improvement of the navigation of the Patapsco River, and to render the port of Baltimore accessible to the war steamers of the United States," had been returned by the President, with his objections, to the Senate, in which it originated, and that the Senate having proceeded, in pursuance of the constitution, to reconsider the same, had "*Resolved*, that the said bill do pass, two thirds of the Senate agreeing to pass the same," the House of Representatives proceeded, in pursuance of the constitution, to reconsider the said bill, and,

Resolved, That the said bill do pass, two thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. CULLOM,
Clerk House of Reps.

CHAP. 126.—An Act For continuing the improvement of the Des Moines Rapids, in the Mississippi River. Aug. 16, 1856.
Vol. 11, p. 51.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby appropriated, out of any money in the treasury not otherwise appropriated, the sum of two hundred thousand dollars, for continuing the improvement of the Des Moines Rapids, in the Mississippi River, to be expended under the superintendence of the Secretary of War.

Appropriation
for continuing
improvement of
Des Moines
Rapids.

IN THE HOUSE OF REPRESENTATIVES
OF THE UNITED STATES,
August 11th, 1856.

The President of the United States having returned to the House of Representatives, in which it originated, the bill entitled "An act for continuing the improvement of the Des Moines Rapids, in the Mississippi River," with his objections thereto, the House of Representatives proceeded, in pursuance of the Constitution, to reconsider the same; and *Resolved*, That the said bill do pass, two thirds of the House of Representatives agreeing to pass the same.

Attest:

WM. CULLOM,
Clerk of House Representatives.

IN THE SENATE OF THE UNITED STATES,
August 16th, 1856.

The Senate having proceeded, in pursuance of the Constitution, to reconsider the bill entitled "An act for continuing the improvement of the Des Moines Rapids, in the Mississippi River," returned to the House of Representatives by the President of the United States, with his

objections, and sent by the House of Representatives to the Senate, with the message of the President returning the bill:

Resolved, That the bill do pass, two thirds of the Senate agreeing to pass the same.

Attest:

ASBURY DICKINS,
Secretary.

Feb. 26, 1857.

Vol. 11, p. 166.

CHAP. 60.—An Act To authorize the people of the Territory of Minnesota to form a constitution and State government, preparatory to their admission in the Union on an equal footing with the original States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the inhabitants of that portion of the Territory of Minnesota which is embraced within the following limits, to wit: * * * be and they are hereby authorized to form for themselves a Constitution and State Government, by the name of the State of Minnesota, and to come into the Union on an equal footing with the original States, according to the federal constitution.

Inhabitants of part of Minnesota authorized to form constitution and State government.

Propositions to be acted on by convention.

SEC. 5 *And be it further enacted*, That the following propositions be, and the same are hereby offered to the said convention of the people of Minnesota for their free acceptance or rejection, which, if accepted by the convention, shall be obligatory on the United States and upon the said State of Minnesota, to wit:

Percentage on land sales.

* * * * *

Fifth. That five per centum of the net proceeds of sales of all public lands lying within said State, which shall be sold by Congress after the admission of the said State into the Union, after deducting all the expenses incident to the same, shall be paid to said State, for the purpose of making public roads and internal improvements, as the legislature shall direct: *Provided*, The foregoing propositions herein offered are on the condition, that the said convention which shall form the constitution of said State shall provide, by a clause in said constitution, or an ordinance, irrevocable without the consent of the United States, that said State shall never interfere with the primary disposal of the soil within the same, by the United States, or with any regulations Congress may find necessary for securing the title in said soil to *bona fide* purchasers thereof; and that no tax shall be imposed on lands belonging to the United States, and that in no case shall non-resident proprietors be taxed higher than residents.

Propositions made conditional.

Approved, February 26, 1857.

CHAP. 173.—An Act For the relief of Collier H. Minge, Philip T. Ellicott, and Lucretia A. Brodie, administratrix of Charles Brodie.

Mar. 3, 1857.
Vol. 11, p. 520.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be and he is hereby directed, out of any money in the treasury not otherwise appropriated, to pay to Collier H. Minge, Philip T. Ellicott, and Lucretia A. Brodie, administratrix of Charles Brodie, the sum of six thousand nine hundred and nineteen dollars and thirty-eight cents, to be divided equally among them; and to Collier H. Minge and Philip T. Ellicott, the sum of thirteen thousand nine hundred and thirteen dollars and sixty-two cents, to be equally divided among them. The said sums being in full for the amount due on a contract dated fifth December, eighteen hundred and thirty-eight, for excavating the channel on Dog-River bar, in the Bay of Mobile.

\$6,919.38 to be paid to C. H. Minge, P. T. Ellicott, and L. A. Brodie, administratrix of C. Brodie.

\$13,913.62 to be paid to C. H. Minge and P. T. Ellicott.

Approved, March 3, 1857.

CHAP. 112.—An Act For the relief of Alonzo and Elbridge G. Colby.

June 7, 1858.
Vol. 11, p. 543.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of twenty-five hundred and two dollars and eleven cents be, and the same is hereby, appropriated, out of any moneys in the Treasury of the United States not otherwise appropriated, to and for Alonzo Colby and Elbridge G. Colby, of the town of Buck[s]port, in the State of Maine, the sum being the balance due them on their contract with the United States, dated July twenty-four, eighteen hundred and fifty-five, for constructing a breakwater at Owl's Head harbor, Penobscot River, Maine.

\$2,502.11 to be paid Alonzo and Elbridge G. Colby, being balance due on contract.

Approved, June 7, 1858.

CHAP. 133.—An Act For the relief of certain settlers on the public lands in the State of Wisconsin.

June 9, 1858.
Vol. 11, p. 313.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the even-numbered sections of land selected by the State of Wisconsin in the month of June, in the year eighteen hundred and forty-nine, to satisfy the quantity of land due said State under the act of Congress of August eighth, eighteen hundred and forty-six, granting land in aid of the improvement of the Fox and Wisconsin rivers, as *have* been sold, or contracted to be sold, by said State or its assigns, under the laws thereof, *are* hereby confirmed to said State, as parts of said grant, and the title of the purchasers declared to be valid as though the said selections had been made in conformity with law: *Provided, That*

Certain selections of land under act of 1846, c. 170, for improvement of Fox and Wisconsin rivers, confirmed to Wisconsin.

Proviso.

Proviso.

nothing contained in this act shall be construed to increase the quantity of land to which the State is entitled under the grant aforesaid: *And provided further*, That a schedule duly *certify* [certified] by the governor, of the lands sold and contracted for to be sold, prior to the passage of this act, shall be filed in the General Land-Office within six months from the date of this act.

* * * * *

Approved, June 9, 1858.

June 9, 1858.
Vol. 11, p. 371.

[No. 23.] A Resolution Authorizing the Secretary of War to expend the appropriation made July eighth, eighteen hundred and fifty-six, upon such channel of the St. Mary's River as he may select.

Appropriation
may be expended
in excavating
channel.
1856, c. 55.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the appropriation of July eighth, eighteen hundred and fifty-six, made for the improvement of St. Mary's River, in the State of Michigan, may be expended in excavating such channel as, from the evidence which he may obtain, the Secretary of War shall deem best.

Approved, June 9, 1858.

Feb. 9, 1859.
Vol. 11, p. 559.

CHAP. 30.—An Act For the relief of Henry Hubbard.

\$672.75, and in-
terest, to be paid
Henry Hubbard.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be allowed and paid, out of any money in the treasury not otherwise appropriated, to Henry Hubbard, the sum of six hundred and seventy-two dollars and seventy-five cents, for his services as United States agent charged with the safe-keeping of the public property at the harbor of Ashtabula, in the State of Ohio, as certified by the Bureau of Topographical Engineers, with interest, at the rate of six per centum per annum, from the eleventh of June, eighteen hundred and fifty-six, from which time payment is shown to have been delayed for want of appropriation.

Approved, February 9, 1859.

Feb. 14, 1859.
Vol. 11, p. 383.

CHAP. 33.—An Act For the admission of Oregon into the Union.

Preamble.

Whereas the people of Oregon have framed, ratified, and adopted a constitution of State government which is republican in form, and in conformity with the Constitution of the United States, and have applied for admission into the Union on an equal footing with the other States: Therefore—

Oregon admit-
ted.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Oregon be, and she is hereby, received into the Union on

an equal footing with the other States in all respects whatever, with the following boundaries: * * *

* * * *

SEC. 4. *And be it further enacted*, That the following propositions be, and the same are hereby, offered to the said people of Oregon for their free acceptance or rejection, which, if accepted, shall be obligatory on the United States and upon the said State of Oregon, to wit:

Proposition submitted to popular vote.

* * * *

Fifth. That five per centum of the net proceeds of sales of all public lands lying within said State which shall be sold by Congress after the admission of said State into the Union, after deducting all the expenses incident to the same, shall be paid to said State, for the purpose of making public roads and internal improvements, as the legislature shall direct: *Provided*, That the foregoing propositions, hereinbefore offered, are on the condition that the people of Oregon shall provide by an ordinance, irrevocable without the consent of the United States, that said State shall never interfere with the primary disposal of the soil within the same by the United States, or with any regulations Congress may find necessary for securing the title in said soil to bona fide purchasers thereof; and that in no case shall non-resident proprietors be taxed higher than residents.

Percentage on land sales.

Proviso.
Conditions on which propositions are offered.

Sixth. And that the said State shall never tax the lands or the property of the United States in said State: *Provided, however*, That in case any of the lands herein granted to the State of Oregon have heretofore been confirmed to the Territory of Oregon for the purposes specified in this act, the amount so confirmed shall be deducted from the quantity specified in this act.

United States property free from taxation.
Proviso.

* * * *

Approved, February 14, 1859.

[No. 12.] A Resolution Authorizing the enlargement of, and construction of a branch to, the Louisville and Portland Canal.

May 24, 1860.
Vol. 12, p. 116.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the President and Directors of the Louisville and Portland Canal Company be, and they are hereby, authorized, with the revenues and credits of the company, to enlarge the said canal and to construct a branch canal from a suitable point on the south side of the present canal, to a point in the Ohio River, opposite Sand Island, sufficient to pass the largest class of steam-vessels navigating the Ohio River: *Provided*, That nothing herein contained, shall authorize the said president and directors, directly or indirectly, to use or pledge the faith or credit of the United States for the said enlargement or construction. It hereby being expressly declared, that the Government of the United States shall not be in any manner liable for said enlarge-

Louisville and Portland Canal to be enlarged and branch built.

Proviso.

United States in no way liable.

Tolls.

ment and construction: *Provided, further,* That when said canal is enlarged and its branch canal constructed and its cost of said improvements paid for, no more tolls shall be collected than an amount sufficient to keep the canal in repair and pay for all necessary superintendence and management.

Approved, May 24, 1860.

June 9, 1860.
Vol. 12, p. 849.

CHAP. 99.—An Act For the relief of Shade Calloway.

Payment to be
made to Shade
Calloway for
work on Tennes-
see River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the proper accounting officers allow and pay out of the treasury to Shade Calloway the sum of one thousand three hundred and fifty dollars, for work done by him on the Tennessee River, under his contract with Brevet Lieutenant-Colonel J. McClelland, dated the sixteenth of September, eighteen hundred and fifty-three, according to the account approved and certified by the agent placed in charge of said work at the death of the said officer.

Approved, June 9, 1860.

June 12, 1860.
Vol. 12, p. 29.

CHAP. 114.—An Act To liquidate the unadjusted contracts of the Tennessee River improvement.

Certain con-
tracts to be au-
dited and paid.
1852, c. 104.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all contracts made by the duly authorized officers of the Government, appointed under the act of thirty-second Congress making an appropriation of fifty thousand dollars for the improvement of the Tennessee River, shall be audited by the accounting officers of the treasury, and paid out of any money in the treasury not otherwise appropriated^[a].

Approved, June 12, 1860.

Jan. 19, 1861.
Vol. 12, p. 125.

CHAP. 11.—An Act To continue in force an Act therein mentioned, relating to the port of Baltimore.

Act 1800, c. 15,
revived in part
and extended to
Mar. 3, 1871.

See acts 1808,
c. 47; 1814, c. 60;
1822, c. 29; 1828,
c. 15; 1838, c. 34;
1843, c. 45; 1850,
c. 17.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act passed the seventeenth day of March, one thousand eight hundred, entitled "An act declaring the assent of Congress to certain acts of the States of Maryland and Georgia," and which by subsequent acts have been continued in force until the third day of March, one thousand eight hundred and sixty-one, be and the same, so far as it relates to the act of the State of Maryland, is hereby revived

^a The amount paid by the Treasury Department under this act was \$1,406.94.

and continued in force until the third day of March, one thousand eight hundred and seventy-one: *Provided*, That the duty shall not be levied on any vessel more than once in any month.

Proviso

Approved, January 19, 1861.

CHAP. 20.—An Act For the admission of Kansas into the Union.

Jan. 29, 1861.
Vol. 12, p. 126.

Whereas the people of the Territory of Kansas, by their representatives in Convention assembled, at Wyandott, in said Territory, on the twenty-ninth day of July, one thousand eight hundred and fifty-nine, did form for themselves a constitution and State government, republican in form, which was ratified and adopted by the people at an election held for that purpose on Tuesday, the fourth day of October, one thousand eight hundred and fifty-nine, and the said Convention has, in their name and behalf, asked the Congress of the United States to admit the said Territory into the Union as a State, on an equal footing with the other States: Therefore

Preamble.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the State of Kansas shall be, and is hereby declared to be, one of the United States of America, and admitted into the Union on an equal footing with the original States in all respects whatever. * * *

Kansas admitted as State.

SEC. 3. And be it further enacted, That nothing in this act shall be construed as an assent by Congress to all or to any of the propositions or claims contained in the ordinance of said constitution of the people of Kansas, or in the resolutions thereto attached; but the following propositions are hereby offered to the said people of Kansas for their free acceptance or rejection, which, if accepted, shall be obligatory on the United States and upon the said State of Kansas, to wit:

Congress does not assent, etc.

Propositions to be submitted to popular vote

Fifth, That five per centum of the net proceeds of sales of all public lands lying within said State which shall be sold by Congress after the admission of said State into the Union, after deducting all the expenses incident to the same, shall be paid to said State for the purpose of making public roads and internal improvements, or for other purposes, as the Legislature shall direct: *Provided*, That the foregoing propositions hereinbefore offered are on the condition that the people of Kansas shall provide by an ordinance, irrevocable without the consent of the United States, that said State shall never interfere with the primary disposal of the soil within the same by the United States, or with any regulations Congress may find necessary for securing the title in said soil to bona fide purchasers thereof.

Percentage on land sales shall be paid to State for making roads and internal improvements.

Proviso.

Conditions.

State not to tax property of United States in State.
 Proviso as to lands heretofore confirmed to Kansas.

Sixth, And that the said State shall never tax the lands or the property of the United States in said State: *Provided, however,* That in case any of the lands herein granted to the State of Kansas have heretofore been confirmed to the Territory of Kansas for the purposes specified in this act, the amount so confirmed shall be deducted from the quantity specified in this act.

* * * * *

Approved, January 29, 1861.

*

Feb. 21, 1861.
 Vol. 12, p. 250.

[No. 9.] Joint Resolution Giving the assent of Congress to certain Acts passed, or to be passed, by the legislatures of the States of Arkansas, Louisiana, and Texas, or any two of them, in relation to the "raft" of Red River, and for other purposes.

Assent of Congress given to acts for improving navigation of Red River.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress be, and the same is hereby, given, to any acts that have been, or may be, passed by the Legislatures of the States of Arkansas, Louisiana, and Texas, or of any two of them, having for their object the improvement of the navigation of Red River by the removal of the "Raft" therefrom.

Tolls may be charged, etc., for thirty years.

SEC. 2. *And be it further resolved,* That Congress hereby assents, that after and so soon as any company incorporated by the States aforesaid, or any two of them, for the purpose, shall have removed the obstructions to navigation in Red River caused by the "Raft," and have rendered the same navigable, and not before, the said States, or any two of them, may, through the said company, under and in accordance with, and in the mode provided by, the acts incorporating the same, for the benefit of the company and to reimburse to it its expenditures in removing said "Raft," levy and collect, by way of commutation for duties of tonnage, tolls upon all boats or other water-crafts ascending or descending said river, and passing through the portion thereof that shall so have been improved and rendered navigable, not to exceed the following sums: that is to say, fifty cents on and for each bale of cotton, and twenty-five cents on and for each barrel of goods, wares, and merchandise wherewith such boats or crafts may be laden; and that this privilege may continue until the expiration of thirty years from the ninth day of March, Anno Domini eighteen hundred and sixty: *Provided,* That nothing herein contained shall authorize the said company to impair the navigation of Red Bayou: *Provided, further,* That the United States shall have the right, at any time after the expiration of ten years, to take possession of the work by paying to the company the amount of expenditure, with seven per centum interest.

Proviso.

Proviso.

Approved, February 21, 1861.

CHAP. 1.—An Act Declaring the assent of Congress to an Act of the legislature of the State of Illinois, therein named.

Jan. 16, 1864
Vol. 13, p. 1.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of congress is hereby given to the operation of the eleventh section, chapter fifteen, of the act of the general assembly of the State of Illinois, approved February thirteenth, eighteen hundred and sixty-three, entitled "An act to reduce the charter of the city of Chicago, and the several acts amendatory thereof, into one act, and to revise the same,"—which section is as follows: "Said city shall have the power to extend aqueducts or inlet-pipes into Lake Michigan, so far as may be deemed necessary to insure a supply of pure water, and to erect a pier or piers in the navigable waters of said lake, for the making, preserving, and working of said pipes or aqueducts: *Provided, That* such piers shall be furnished with a beacon-light, which shall be lighted at all such seasons and hours as the light on the pier at the entrance of Chicago river."*

City of Chicago may erect piers in navigable waters of Lake Michigan to protect aqueduct pipes.

Piers to be lighted.

Approved, January 16, 1864.

CHAP. 55.—An Act For the relief of Daniel Wormer.

Apr. 9, 1864.
Vol. 13, p. 578.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he hereby is, directed, out of any money in the treasury not otherwise appropriated, to pay to Daniel Wormer the sum of one thousand seven hundred and seventy-eight dollars and thirty-six cents, in full for all percentage retained by the Government on payments heretofore made to him, and for all timber or other materials furnished by him in the construction of the pier at Little Sodus Bay, on Lake Ontario.

Payment to Daniel Wormer for timber, etc., for pier at Little Sodus Bay, N. Y.

Approved, April 9, 1864.

CHAP. 56.—An Act For the relief of Darius S. Cole.

Apr. 9, 1864.
Vol. 13, p. 578.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed, out of any money in the treasury not otherwise appropriated, to pay to Darius S. Cole the sum of two thousand two hundred and twenty-four dollars, in full for materials furnished to the United States for the construction of the pier in Little Sodus Bay, Lake Ontario.

Payment to Darius S. Cole for materials for pier at Little Sodus Bay, N. Y.

Approved, April 9, 1864.

Apr. 9, 1864.
Vol. 13, p. 579.

CHAP. 57.—An Act For the relief of William G. Brown.

Payment to
Wm. G. Brown
for stone, etc., for
pier at Little So-
dus Bay, N. Y.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he hereby is, directed, out of any money in the treasury not otherwise appropriated, to pay to William G. Brown the sum of ninety-nine dollars, in full for stone or other materials used by order of the agents of the Government in the construction of a pier in Little Sodus Bay, on Lake Ontario, in the year one thousand eight hundred and fifty-three.

Approved. April 9, 1864.

May 19, 1864.
Vol. 13, p. 580.

CHAP. 91.—An Act for the relief of Charles L. Nelson

Payment to
Charles L. Nelson
for services
as agent for im-
provement at
Burlington Har-
bor, Vt.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to Charles L. Nelson the sum of three hundred and eight dollars, out of any money in the treasury not otherwise appropriated, it being for his services as agent for the improvement of the harbor of Burlington, Vermont, from the fifteenth day of January, eighteen hundred and fifty-three, to the second day of April, eighteen hundred and fifty-three, inclusive, at four dollars per day.

Approved, May 19, 1864.

June 28, 1864.
Vol. 13, p. 200.

CHAP. 168.—An Act To provide for the repair and preservation of certain public works of the United States.

Appropriation
to preserve cer-
tain public works
on Northern and
Northwestern
Lakes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, appropriated, out of any money in the treasury not otherwise appropriated, the sum of two hundred and fifty thousand dollars, to be expended under the direction of the Secretary of War, in protecting the commerce of the lakes by causing the public works connected with the harbors on Lakes Champlain, Ontario, Erie, St. Clair, Huron, Michigan, and Superior, to be repaired and made useful for purposes of commerce and navigation, so far as the same, in his judgment, may be necessary.

Appropriations
to preserve cer-
tain public works
on seaboard.

SEC. 2. *And be it further enacted,* That there be, and hereby is, appropriated, out of any money in the treasury not otherwise appropriated, the further sum of one hundred thousand dollars, to be expended under the direction of the Secretary of War, in repairing and rendering useful for purposes of commerce and navigation such of the public works connected with the harbors on the seaboard of the United States as may, in his judgment, need such expenditure.

Approved, June 28, 1864.

Statement showing the works of river and harbor improvement to which the appropriations made by the foregoing act, approved June 28, 1864, were distributed, and the amount allotted to each work, viz:

[Appropriation of \$250,000.]

Burlington Harbor, Vermont.....	\$13,500.00
Buffalo Harbor, New York.....	15,000.00
Charlotte Harbor (Genesee River), New York.....	25,000.00
Oswego Harbor, New York.....	25,000.00
Plattsburg Harbor, New York.....	2,000.00
Erie Harbor, Pennsylvania.....	15,000.00
Chicago Harbor, Illinois.....	25,000.00
Vermilion Harbor, Ohio.....	5,758.97
Black River (Lorain Harbor) Ohio.....	20,000.00
Cleveland Harbor, Ohio.....	20,000.00
Fairport Harbor (Grand River), Ohio.....	24,453.24
Sandusky Harbor, Ohio.....	10,000.00
St. Joseph Harbor, Michigan.....	15,000.00
Milwaukee Harbor, Wisconsin.....	15,000.00
Racine Harbor, Wisconsin.....	3,600.00
Sheboygan Harbor, Wisconsin.....	10,000.00
Balance.....	[^a]5,687.79
Total.....	[^b]250,000.00

[Appropriation of \$100,000.]

Susquehanna River, near Havre de Grace, and Patapsco River, near Baltimore, Maryland.....	[^c]20,000.00
Hudson River, New York.....	35,000.00
Plymouth Beach, Massachusetts.....	8,315.00
Provincetown Harbor, Massachusetts.....	30,000.00
Balance (contingencies, etc.).....	6,685.00
	100,000.00

[No. 59.] A Resolution For the relief of the State of Wisconsin.

July 1, 1864.

Vol. 13, p. 413.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Department of the Interior shall, in adjusting the amount due the State of Wisconsin, under existing laws, as five percentum of the net proceeds of sales of the public lands within her limits, estimate and charge against her the value of the one hundred and twenty-five thousand four hundred and thirty-one and eighty-two one-hundredths acres of land granted to the Territory of Wisconsin, to aid in the construction of the Milwaukee and Rock River Canal which have been sold by said territory or said state, at one dollar and twenty-five cents per acre, and as much more as the territory and state received upon the same upon sales of any part

• Wisconsin to be charged with proceeds of sales of land granted to Milwaukee and Rock River Canal.

^a It is not known to what works the expenditure of this balance was applied.

^b In 1868 \$10,000 of this appropriation was allotted for St. Marys River, Michigan, which amount was probably derived from the unexpended balances of the other allotments.

^c The whole of this allotment appears to have been expended on Baltimore Harbor.

To be credited
with what.

Allowance to
canal company.

thereof at a higher price, and shall credit said state with the amount that has been legally and properly applied by said state or territory towards the cost of selling said land and towards the construction of said canal. And the said secretary shall also settle and allow to the Milwaukie and Rock River Canal Company such sums of money as have been properly expended by said company in the survey and location of said canal, in the construction thereof, as far as the same has been constructed, together with dams, locks, and slack-water navigation, and in the management and keeping the same in repair; and the same shall be paid to the said canal company out of any money in the treasury not otherwise appropriated, not exceeding in amount, however, the balance charged against the State of Wisconsin upon the sales of said canal lands, as above required, after deducting the sum allowed said state for money paid by her out of the same fund. The same to be received by said canal company in full payment and satisfaction of all claims of said company against the state of Wisconsin and of the United States on account of said canal land grant, or on account of any action of the Territory or State of Wisconsin, or of the United States, in relation thereto.

Commissioner
General Land
Office to adjust
accounts.

SEC. 2. *And be it further resolved*, That the commissioner of the general land-office be, and he is hereby, appointed commissioner to adjust the accounts herein provided for, under the supervision of the Secretary of the Interior, and to determine what sum shall be charged to said State of Wisconsin for the lands granted for the construction of said canal; and what sums shall be credited, respectively, to said state and said company for the moneys expended by them in the construction of said locks and canal as herein provided.

Approved, July 1, 1864.

July 2, 1864.

Vol. 13, p. 353.

CHAP. 211.—An Act Making appropriations for the construction, preservation, and repairs of certain fortifications and other works of defence for the year ending the thirtieth of June, eighteen hundred and sixty-five, and for other purposes.

Appropriation
for fortifications,
etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, out of any money in the treasury not otherwise appropriated, for the construction, preservation, and repairs of certain fortifications and other works of defence for the year ending the thirtieth of June, eighteen hundred and sixty-five:—

* * * * *

Great Brewster
Island, Boston,
Mass.

For sea-wall of Great Brewster's Island, forty thousand dollars.

For repair of sea-walls on Deer and on Lovell's Island, ten thousand dollars. Deer and Lovell's islands, Boston, Mass.

* * * * *

For repairs and completion of sea-wall at Buffalo, thirty-seven thousand five hundred dollars. Buffalo, N. Y.

* * * * *

Approved, July 2, 1864.

Feb. 28, 1865.

Vol. 13, p. 442.

CHAP. 68.—An Act Making appropriations for the construction, preservation, and repairs of certain fortifications and other works of defence, for the year ending the thirtieth of June, 'eighteen hundred and sixty-six.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, out of any money in the treasury not otherwise appropriated, for the construction, preservation, and repairs of certain fortifications and other works of defence for the year ending the thirtieth of June, eighteen hundred and sixty-six:

* * * * *

For sea-wall of Great Brewster's Island, Boston harbor, Massachusetts, twenty thousand dollars. Sea wall, Great Brewster Island.

For repairs of sea-walls on Deer and on Lovell's Islands, Boston harbor, Massachusetts, three thousand dollars. Sea wall, Deer and Lovell's islands.

* * * * *

Approved, February 28, 1865.

Feb. 28, 1865.

Vol. 13, p. 445.

CHAP. 72.—An Act Granting to the Michigan City Harbor Company the use of Government piers in said harbor for the purpose of protecting said harbor.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby granted to the Michigan City Harbor Company, at Michigan City, in the State of Indiana, the privilege of using the foundations of the old government piers now in said harbor, for the purpose of improving and protecting the said harbor, and no expenses made by the said harbor company for this purpose shall be considered a charge against the government.

* * * * *

Approved, February 28, 1865.

Mar. 3, 1865.

Vol. 13, p. 519.

CHAP. 102.—An Act Granting land to the State of Michigan, to aid in building a harbor and ship-canal at Portage Lake, Kewenaw Point, Lake Superior.

Michigan may locate, etc., ship canal, etc., through "The Portage." 1886, c. 161.

Limit to grant.

Width and depth of canal.

Grant to Michigan of public lands to aid in building ship canal.

How and where selected.

Proviso.

Lands granted to be subject to disposal by State.

Canal to be public highway, and no charge to United States vessels.

Route of canal to be established before lands are disposed of.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby, granted to the State of Michigan the right of locating and constructing a breakwater and harbor and ship canal through any public lands at or upon the neck of land on Lake Superior known as "The Portage:" Provided, That not more than one thousand feet in width on the bank of Lake Superior shall be occupied by said breakwater and harbor, and that a strip of land not more than four hundred feet in width on said neck of land shall be occupied by said canal: And provided, further, That said ship-canal shall be at least one hundred feet in width, with a depth of water not less than thirteen feet.

SEC. 2. *And be it further enacted, That there be, and hereby is, granted to the said State of Michigan, for the purpose of aiding said State in constructing and completing a harbor and ship-canal to connect the waters of Lake Superior with the waters of Portage Lake, two hundred thousand acres of public lands, to be selected in subdivisions agreeably to the United States survey, by an agent or agents appointed by the governor of said state, subject to the approval of the Secretary of the Interior, from any lands in the upper peninsula of said state, subject to private entry: Provided, That said selections shall be made from alternate and odd-numbered sections of land nearest the location of said canal in said upper peninsula, not otherwise appropriated, and not from lands designated by the United States as "mineral" before the passage of this act, nor from lands to which the rights of preëmption or homestead have attached.*

SEC. 3. *And be it further enacted, That the said lands hereby granted shall be subject to the disposal of the legislature of said state, or, if the legislature thereof shall not be in session, or shall adjourn within ten days after the passage and approval of this act, then said lands shall be subject to the disposal of the governor and board of control of said state, for the purpose aforesaid and for no other; and the said canal shall be and remain a public highway for the use of the government of the United States, free from toll or charge upon the vessels of said government, or upon vessels employed by said government in the transportation of any property or troops of the United States.*

SEC. 4. *And be it further enacted, That before it shall be competent for said state to dispose of any of said lands, to be selected as aforesaid, the plan of said breakwater and harbor, and the route of said canal shall be established as aforesaid, and a plat or plats thereof shall be filed in the office of the War Department, and a duplicate thereof in the office of the commissioner of the general land-office.*

SEC. 5. *And be it further enacted*, That if the said breakwater, harbor, and ship-canal shall not be completed within two years from the passage of this act, the lands hereby granted shall revert to the United States.

Unless canal, etc., completed into two years, land to revert.
1869, Res. No. 16;
1871, Res. No. 47;
1872, c. 66; 1873, c. 323.

SEC. 6. *And be it further enacted*, That the legislature of said state shall cause to be kept an accurate account of the sales and net proceeds of the lands hereby granted, and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a statement of the same annually to the Secretary of the Interior; and whenever said state shall be fully reimbursed for all advances made for the construction, repairs, and operating of said canal, with legal interest on all advances, until the reimbursement of the same, or upon payment by the United States of any balance of such advances over such receipts from said lands and canal, with such interest, the said state shall be allowed to tax for the use of said canal only such tolls as shall be sufficient to pay all necessary expenses for the care, charge, and repair of the same.

Account of sales of lands, and net proceeds and earnings and expenditures, to be kept.

When State is reimbursed; tolls to be such only as shall pay expenses of canal.

Approved, March 3, 1865.

CHAP. 32.—An Act Granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship canal at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan, in said State.

Apr. 10, 1866.
Vol. 14, p. 30.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Wisconsin for the purpose of aiding said State in constructing and completing a breakwater and harbor and ship canal to connect the waters of Green bay with the waters of Lake Michigan, two hundred thousand acres of public lands, to be selected in subdivisions agreeably to the United States survey, by an agent or agents appointed by the governor of said State, subject to the approval of the Secretary of the Interior, from lands subject to private entry: *Provided*, That said selections shall all be made from alternate and odd numbered sections of land nearest the location of said harbor and canal in said State not otherwise appropriated, and not from lands designated by the United States as "mineral" before the passage of this act, nor from lands to which the rights of pre-emption or homestead have attached.

Grant of land to Wisconsin for breakwater, harbor, and ship canal.

Proviso:
Selections, how made.

SEC. 2. *And be it further enacted*, That the said lands hereby granted shall be subject to the disposal of the legislature of said State, or, if the legislature thereof shall not be in session, or shall adjourn within ten days after the passage and approval of this act, then said lands shall be subject to the disposal of the governor and board of commissioners of school, university, and swamp lands of said State, for the purposes aforesaid, and for no other; and the said

Lands subject to disposal of legislature, etc.

Canal to be public highway, etc.

canal shall be and remain a public highway for the use of the government of the United States, free from toll or charge upon the vessels of said government, or upon vessels employed by said government in the transportation of any property or troops of the United States.

Plans, etc., to be filed in Departments.

SEC. 3. *And be it further enacted*, That before it shall be competent for said State to dispose of any of said lands, to be selected as aforesaid, the plan of said breakwater and harbor and the route of said canal shall be established, and a plat or plats thereof shall be filed in the office of the War Department, and a duplicate thereof filed in the office of the Commissioner of the General Land Office.

Unless work is completed in 3 years, unsold lands revert to United States. 1872, c. 23.

SEC. 4. *And be it further enacted*, That if the said breakwater, harbor, and canal, shall not be completed within three years from the passage of this act, the lands hereby granted and remaining unsold shall revert to the United States.

Account to be kept; and when work is paid for, only such tolls, etc.

SEC. 5. *And be it further enacted*, That the legislature of said state shall cause to be kept an accurate account of the sales and net proceeds of the lands hereby granted, and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a statement of the same annually to the Secretary of the Interior. And whenever said State shall be fully reimbursed for all advances made for the construction, repairs, and operating of said canal, with legal interest on all advances until the reimbursement of the same, or upon payment by the United States of any balance of such advances over such receipts from said lands and canal, with such interest, the said State shall be allowed to tax for the use of said canal only such tolls as shall be sufficient to pay all necessary expenses for the care, charge, and repair of the same.

Width and depth of canal.

SEC. 6. *And be it further enacted*, That said ship canal shall be at least one hundred feet in width, with a depth of water not less than thirteen feet.

Approved, April 10, 1866.

June 12, 1866.
Vol. 14, p. 61.

CHAP. 115.—An Act Making appropriations for the construction, preservation, and repairs of certain fortifications and other works of defence, for the year ending June thirty, eighteen hundred and sixty-seven.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and they are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the construction, preservation, and repairs of certain fortifications and other works of defence for the year ending the thirtieth of June, eighteen hundred and sixty-seven:

* * * * *

For sea-wall at Great Brewster's island, Boston harbor, Sea wall, Great Massachusetts, seventy-five thousand dollars. Brewster Island.

For sea-walls on Deer and Lovell's islands, Boston harbor, Sea walls on Deer and Lovell's Massachusetts, fifty thousand dollars. islands.

* * * *

Approved, June 12, 1866.

CHAP. 138.—An Act Making appropriations for the repair, preservation, and completion of certain public works heretofore commenced under the authority of law, and for other purposes.

June 23, 1866.
Vol. 14, p. 70.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction and superintendence of the Secretary of War, for the repair, preservation, and completion of the following works, heretofore commenced under the authority of law, and for the other purposes hereinafter named, that is to say:

Appropriation for repair, preservation, and completion of certain public works.

For examination and survey of works of improvement for which appropriations have been heretofore made, and concerning which no sufficient information is now in possession of the department, and for examination and survey at other points in the fourth section of this act specified, that is to say, on the Atlantic coast thirty thousand dollars; on the Pacific coast twenty-five thousand dollars; on the northwestern lakes one hundred thousand dollars; on the western and northwestern rivers one hundred thousand dollars. And the Secretary of War, when the public interests require it, shall cause examinations or re-examinations to be made, with suitable surveys of the works aforesaid, and all other works provided for by this act, and shall make such changes or modifications of the plans heretofore adopted for their improvement as shall be necessary and proper. And he shall cause such needful examination of other harbors and places in the fourth section of this act specified, upon the sea and lake coasts, and on western rivers, to be made as will enable him to determine what improvements thereof are required to render them safe and convenient for the navigation of the naval and commercial vessels of the United States and the cost of such improvements, and he shall make full report thereof, and of the plans deemed advisable therefor, to Congress, at the commencement of the next session, for such action as may be judged expedient and right. And if, upon such examination and survey of works first herein named, being works now existing or in process of completion, and concerning which no sufficient information is now in the possession of the department, there shall remain an unexpended balance of appropriation properly applicable thereto from the sums herein appropriated, which may, in the judgment

Examinations and surveys.

Re examinations and changes in plans.

Examination of harbors to determine improvements, etc., necessary to make them safe for navigation.

Réport to Congress.

Application of certain unexpended balances.

of the Secretary of War, be judiciously applied towards the economical and needful continuation or completion of such works, the Secretary of War shall direct such balance to be applied and used accordingly; but no moneys shall be used for such purposes, excepting from the balances remaining from appropriations herein made for the specific examination and survey of such works.

- Breakwater at Portland Harbor. For extending the breakwater at Portland harbor, Maine, one hundred and five thousand one hundred and eleven dollars and five cents.
- Hudson River. For improvement of navigation of Hudson river, New York, fifty thousand dollars.
- Provincetown Harbor. For preservation of Provincetown harbor, Massachusetts, forty-three thousand and sixty-eight dollars and forty-four cents.
- Thames River. For improvement of Thames river, Connecticut, ten thousand dollars.
- Breakwater at Burlington, Vt. For extension and repair of breakwater at Burlington, Vermont, twenty-seven thousand six hundred and seventy-two dollars and twenty cents.
- Delaware Breakwater. For completion and repair of Delaware breakwater, Delaware bay, one hundred and seven thousand nine hundred and ten dollars.
- Channel of Susquehanna River. For improving channel of Susquehanna river below Havre de Grace, Maryland, twenty-six thousand four hundred dollars.
- Patapsco River. For continuing improvement of Patapsco river, Maryland, five thousand two hundred dollars.
- Snag boats and other apparatus. For construction of snag-boats and other apparatus for clearing western rivers, and for the outfit, working, and preservation thereof, five hundred and fifty thousand dollars.
- Secretary of Navy to transfer, etc., to Secretary of War steamers, etc., for use in raising snags, etc., from western rivers. And the Secretary of the Navy is hereby authorized and directed, upon such terms as may be agreed on by the Secretary of the Navy and the Secretary of War, to transfer to and place at the disposal of the Secretary of War such steamers of the United States, with boats and equipage belonging thereto, and used during the rebellion as portions of the river fleet, as may be so transferred in the judgment of the Secretary of the Navy without detriment to the public service, and as may be conveniently and fitly used in raising snags or removing obstructions from western rivers, so as to render them safe and navigable for the vessels of the United States and for the uses of commerce; and if the same shall be purchased by the Secretary of War, the amounts required for the payment therefor shall be taken from the appropriation aforesaid.
- Appropriation for purchase. For improving the mouth of the Mississippi river, seventy-five thousand dollars.
- Mouth of Mississippi. For improvement of the Mississippi, Missouri, Arkansas, and Ohio rivers, five hundred and fifty thousand dollars.
- Mississippi, Missouri, Arkansas, and Ohio rivers. For improvement of the Des Moines rapids, Mississippi river, two hundred thousand dollars.
- Des Moines Rapids.

For improvement of the Rock Island rapids, Mississippi river, one hundred thousand dollars. Rock Island Rapids.

For improvement of the Saint Clair flats, Michigan, eighty thousand dollars. St. Clair flats.

For improvement of the Saint Mary's river, between Lake Superior and Lake Huron, fifty thousand dollars. St. Marys River.

For improvement of Oswego harbor, New York, and preservation of the public works at that point, forty-five thousand dollars. Oswego Harbor.

For improvement at Little Sodus Bay harbor, Fairhaven, in Cayuga county, New York, thirty-three thousand eight hundred and forty dollars and forty-one cents. Little Sodus Bay Harbor.

For improvement at Big Sodus Bay harbor, Wayne county, New York, fifty-three thousand one hundred and fifty-one dollars and eighty cents. Great Sodus Bay Harbor.

For improvement at the harbor of Genesee river, New York, seventy-five thousand six hundred and seven dollars and thirty cents. Genesee River (Charlotte Harbor).

For improvement of harbor at Buffalo, New York, one hundred thousand dollars. Harbor and sea wall at Buffalo.

For completing the sea wall at Buffalo harbor, New York, thirty-one thousand dollars.

For improvement of harbor and repair of public works at Erie, Pennsylvania, thirty-six thousand nine hundred and sixty-one dollars. Improvement of harbor, etc., at Erie.

For improvement of Conneaut harbor, Ohio, twenty thousand five hundred and thirteen dollars and seventy-four cents. Conneaut.

For improvement of Ashtabula harbor, Ohio, twenty-four thousand seven hundred and eight dollars and eighty-two cents. Ashtabula.

For improvement of harbor at Grand river, Ohio, twenty-four thousand and seventy-two dollars. Grand River (Fairport Harbor).

For improvement of harbor at Cleveland, Ohio, fifty-nine thousand eight hundred and six dollars. Cleveland.

For improvement of harbor at Black river, Ohio, ten thousand dollars. Black River (Lorain Harbor).

For improvement of harbor at Vermillion, Ohio, fifteen thousand three hundred and fifteen dollars and seventy-four cents. Vermillion.

For improvement of harbor at Huron, Ohio, thirty-nine thousand dollars. Huron.

For improvement of harbor at Sandusky City, Ohio, thirty-eight thousand five hundred and eighty dollars. Sandusky.

For improvement of the harbor at Toledo, Ohio, twenty thousand dollars. Toledo.

For improvement of the harbor at Monroe, Michigan, thirty-one thousand and fifteen dollars and twenty-seven cents. Monroe.

For improvement of harbor at Aux Bees Scies, Frankfort, Michigan, eighty-eight thousand five hundred and forty-one dollars. Aux Bees Scies, Frankfort.

For improvement of harbor at Grand Haven, Michigan, sixty-five thousand dollars. Grand Haven.

- Black Lake (Holland Harbor). For improvement of harbor at Black Lake, Michigan, fifty-five thousand six hundred and fifteen dollars and thirty-one cents.
- St. Joseph. For improvement of harbor at Saint Joseph, Michigan, six thousand dollars.
- Saginaw River. For improvement at the mouth of Saginaw river, Michigan, sixty-seven thousand five hundred dollars.
- Chicago. For improvement of harbor at Chicago, Illinois, eighty-eight thousand seven hundred and four dollars.
- Kenosha. For improvement of harbor at Kenosha, Wisconsin, seventy-five thousand four hundred and sixty-one dollars and forty-one cents.
- Racine. For improvement of harbor at Racine, Wisconsin, twenty-three thousand nine hundred and ten dollars.
- Milwaukee. For improvement of harbor at Milwaukee, Wisconsin, forty-eight thousand two hundred and eighty-three dollars and fifty-one cents.
- Sheboygan. For improvement of harbor at Sheboygan, Wisconsin, forty-seven thousand five hundred and ninety-eight dollars and ninety-one cents.
- Manitowoc. For improvement of harbor at Manitowoc, Wisconsin, fifty-two thousand dollars.
- Marcushook. For repairs of government wharves and landings, and improving harbor at Marcus Hook, on Delaware river, Pennsylvania, five thousand dollars: *Provided*, That before expenses shall be incurred on said wharves and landings, it shall be shown to the satisfaction of the Secretary of War that the same belong to the United States.
- Green Bay Harbor. For improvement of the harbor at Green Bay, at the mouth of Fox river, Wisconsin, thirty thousand five hundred dollars.
- Michigan City. For constructing works and improving the entrance into the harbor of Michigan City, Indiana, seventy-five thousand dollars: *Provided*, That it shall be first shown to the satisfaction of the Secretary of War that a sum equal to double the amount aforesaid has been expended by the Michigan City Harbor Company in the construction of a safe and convenient harbor at that place: *And provided*, That the passage of vessels to and from said harbor shall be free and not subject to toll or charge.
- Vessels not subject to toll. 1867, c. 144, §2.
- Kennebec River. For improvement of the Kennebec river, in the State of Maine, between Sheppard Point and the city of Augusta, twenty thousand dollars.
- Willamette River. For removal of obstructions to navigation in the Willamette river, between Portland and its mouth, in the State of Oregon, fifteen thousand dollars.
- Piers in Saco River. For continuing the repair of the piers in Saco river, in the State of Maine, forty thousand dollars.
- Appropriation applied so as to complete works. SEC. 2. *And be it further enacted*, That the money appropriated by this act shall be so applied as to complete, or make the nearest approximation to completing, the work for which each specific appropriation is made; and it shall be the duty of the Secretary of War to apply the sums herein appropriated for other purposes than for examinations
- For other purposes than for examinations, etc., by contract.

and surveys by contract: *Provided*, That no contract shall be made except after public advertisement for proposals in such form and manner as to secure general notice thereof, and the same shall only be made with the lowest responsible bidder therefor, upon security deemed sufficient in the judgment of the Secretary. And it shall be the duty of the said Secretary, at the earliest practicable time, to report to Congress the result of any survey or resurvey, with the plan adopted and the items of expenditure under said plan; and he shall make report of all action taken under the provisions of this act; and he shall accompany said report with a statement of the amount and date of all former appropriations for each work, and a full estimate for its entire and permanent completion, with the amount that can be profitably expended in the next fiscal year. And he shall also state in what collection district each work is located, and at or near what port of entry, light-house, or fort; what amount of revenue was collected at the nearest port of entry for the last fiscal year; and, as far as practicable, what amount of commerce and navigation would be benefitted by the completion of each particular work; *Provided*, That he shall continue to make such a report at the commencement of every session of Congress until the works herein provided for shall all be completed.

Contract not to be made until, etc.

Secretary of War to report results of surveys to Congress with plans, etc.

Report to state what.

Vols. 14, p. 421; 26, p. 766.
Post, pp. 164, 607.

To be continued until works are completed.

SEC. 3. *And be it further enacted*, That whenever the Secretary of War shall invite proposals for any works, or for any material or labor for any works, there shall be separate proposals and separate contracts for each work, and also for each class of material or labor for each work; and he shall report to Congress, at its next session, all the bids with the names of the bidders. All persons not holding commissions in the regular army of the United States who shall be intrusted with the disbursement of the funds appropriated for the works named in this act, shall be required to give bond and ample security for the faithful application of the same; and no such disbursing officer in the army of the United States shall receive any commission or compensation for making such disbursements. And the moneys hereinbefore appropriated shall remain and be at the disposal of the Secretary of War, and subject to his control for the purposes named in this act, until the several works and improvements herein provided for are completed, any law or regulation to the contrary notwithstanding.

Separate proposals and contracts for each work and each class of works, etc.

Disbursing officers, except, etc., to give bond.

United States officers not to receive commissions.

Appropriations, to be at disposal of Secretary of War.

SEC. 4. *And be it further enacted*, That the Secretary of War is hereby directed to cause examinations or surveys, or both as aforesaid, to be made at the following points, namely:

Examinations or surveys, or both, to be made at various points, and purposes of examination.

At Superior City, Eagle Harbor, Marquette, and Lac la Belle, on Lake Superior, and at Ausable river, in the State of Michigan;

Of the Ohio river between Pittsburg, Pennsylvania, and Buffinton island, West Virginia;

Of Sandusky river, Ohio;

At Chester harbor, Pennsylvania;

At Bridgeport, Connecticut;
 At Hell Gate, New York;
 At the port of Ogdensburg, New York;
 At San Francisco, California;
 At the "Grand Chain," in the Ohio river;
 At the harbor of Baltimore, between Fort McHenry and the mouth of the Patapsco river, in the State of Maryland;
 Of the Mississippi river, between Fort Snelling and the Falls of Saint Anthony and the upper or Rock River rapids of the Mississippi river, with a view to ascertain the most feasible means, by economizing the water of the stream, of insuring the passage, at all navigable seasons, of boats drawing four feet of water;

Of the Minnesota river, from its mouth to the Yellow Medicine river, in order to ascertain the practicability and expense, by slack water navigation or otherwise, of securing the continued navigability of said stream during the usual season of navigation;

And for examining and reporting upon the subject of constructing railroad bridges across the Mississippi river, between St. Paul, in Minnesota, and St. Louis, in the State of Missouri, upon such plans of construction as will offer the least impediment to the navigation of the river;

Of Rock river;

The Kennebec river above Gardiner, Maine;

The Penobscot river above Hampden, Maine;

At the Zambro river, Minnesota;

At the Cannon River, Minnesota;

At the harbor and the mouth of the Eighteen-mile creek, at Olcott, New York;

At St. Croix river^a, above the ledge;

From the mouth of Illinois river to La Salle;

Estimates of cost. Together with such necessary estimates of cost, as hereinbefore provided, as will enable the Secretary of War to determine what improvements and public works shall be necessary at the respective points aforesaid.

And the Secretary of War shall cause a survey to be made at the harbor of Burlington, Vermont, and the harbor of Dunkirk, New York;

At the harbor of Oak Orchard creek, New York;

And at Muskegon, White river, Manistee, South Haven, and New Buffalo, in the State of Michigan;

The Fox and Wisconsin rivers, in the States of Wisconsin;

And the Rock river, in the States of Illinois and Wisconsin, with its connections with Lake Winnebago;

And the upper Columbia river, Oregon.

Approved, June 23, 1866.

^a Refers to the river of that name in the State of Maine.

CHAP. 160.—An Act Granting certain lands to the State of Michigan to aid in the construction of a ship canal to connect the waters of Lake Superior with the lake known as Lac La Belle, in said State.

July 3, 1866.
Vol. 14, p. 80.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby, granted to the State of Michigan, for the use and benefit of the "Lac La Belle Harbor Improvement Company," a company organized under and by virtue of the laws of the State of Michigan, for the purpose of aiding in the construction of a ship canal to connect the waters of Lake Superior with the lake known as Lac La Belle, in said State, one hundred thousand acres of the public lands of the United States in the upper peninsula of Michigan, to be selected from the odd-numbered sections of land nearest the location of the said canal, not otherwise reserved or appropriated, nor designated by the United States as "mineral lands" prior to the passage of this act, nor to which the rights of pre-emption or homestead have attached: *Provided*, That the said canal shall be at least one hundred feet wide at the top, seventy-five feet wide at the bottom, and shall have, when completed, a depth of water through its entire length of at least twelve feet, running from sixteen feet of water in Lake Superior to fourteen feet of water in Lac La Belle: *And provided further*, That said canal shall be and remain a public highway for the use of the government of the United States, free from toll or charge upon the vessels of said government, or upon vessels employed by said government in the transportation of any property or troops of the United States.

Lands granted to Michigan to aid in construction of ship canal between Lake Superior and Lac La Belle.

Amount, and where to be selected.

Size of canal and depth of water.

Canal to be public highway, and be free to United States.

SEC. 2. *And be it further enacted*, That the lands hereby granted shall be subject to the disposal of the legislature of the State of Michigan for the purposes aforesaid and no other; that as soon as the governor of the said State shall file, or cause to be filed, with the Secretary of the Interior, a map or plan showing the location of the said canal, then it shall be the duty of the Secretary of the Interior to withdraw from market the lands applicable and subject to the provisions of this act; and whenever the governor of the State of Michigan shall certify to the Secretary of the Interior that the said ship canal has been completed in a good, substantial, and workmanlike manner, in all respects in conformity with the provisions of this act, and to his satisfaction, then it shall be the duty of the Secretary of the Interior to issue patents to the said State of Michigan for the lands hereby granted.

Lands, how to be disposed of by Michigan.

When to be withdrawn from market.

Patents, when to issue.

SEC. 3. *And be it further enacted*, That if the said ship canal shall not be completed within two years from and after the passage of this act, the lands hereby granted shall revert to the United States.

If canal is not completed in 2 years, lands to revert.

Approved, July 3, 1866.

July 3, 1866.
Vol. 14, p. 81.

CHAP. 161.—An Act Granting lands to the State of Michigan to aid in the construction of a harbor and ship canal at Portage Lake, Keewenaw Point, Lake Superior, in said State.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

Lands granted to Michigan for harbor and ship canal at Portage Lake.

1865, c. 102.

Amount.

How to be selected.

To whose use to inure.

Time for completing work extended.

1865, c. 102, § 5;
1869, Res. No. 16;
1871, Res. No. 47;
1872, c. 66; 1873, c. 323.

Mineral lands not granted.

there be, and hereby is, granted to the State of Michigan, to aid in the building of a harbor and ship canal at Portage lake, Keewenaw Point, Lake Superior, in addition to a former grant for that purpose, approved March the third, eighteen hundred and sixty-five, two hundred thousand acres of land in the upper peninsula of the State of Michigan, and from land to which the right of homestead or pre-emption has not attached: *Provided*, That one hundred and fifty thousand acres of said lands shall be selected from alternate odd-numbered sections, and fifty thousand acres from even-numbered sections of the lands of the United States. Said grant of lands shall inure to the use and benefit of the Portage Lake and Lake Superior Ship Canal Company, in accordance with an act of the legislature of the State of Michigan, conferring the land granted to the said State, by the act herein referred to, on said company: *And provided further*, That the time allowed for the completion of said work and the right of reversion to the United States, under the said act of Congress, approved March the third, eighteen hundred and sixty-five, be extended three additional years: *And provided further*, That no lands designated by the United States as "mineral" before the passage of this act shall be included within this grant.

Approved, July 3, 1866.

July 3, 1866.
Vol. 14, p. 362.

[No. 62.] A Resolution For the construction of a railroad bridge across the Cuyahoga River, over and upon the Government piers at Cleveland, Ohio.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the

Swing bridge may be erected upon Government piers across Cuyahoga River at Cleveland, Ohio.

Secretary of War be, and he is hereby, authorized to permit the Cleveland and Toledo Railroad Company and the Cleveland and Pittsburgh Railroad Company jointly, or either of said companies for their joint use or separate use, to erect a swing bridge over and upon the government piers, for the passage of cars across the Cuyahoga river at the city of Cleveland in the State of Ohio, upon such plan as shall hereafter be approved by the city council of said city of Cleveland and by the board of trade of the same city, subject, however, to such conditions, restrictions, and limitations as said Secretary of War may see fit to impose at any period of time, whether prior or subsequent to the erection of said bridge: *Provided*, [That] this resolution and all acts done under it shall be subject to the future action of Congress.

Approved, July 3, 1866.

[No. 75.] Joint Resolution In reference to the Dismal Swamp Canal Company.

July 25, 1866.
Vol. 14, p. 365.

WHEREAS the United States are interested in the Dismal Swamp Canal, connecting the inland waters of the Chesapeake with the sounds of North Carolina, by holding eight hundred shares of the stock of the Dismal Swamp Canal Company; and whereas the canal should be kept open as a navigable highway without further outlay on the part of the United States: Therefore,

Preamble.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and hereby is, authorized to sell said stock at auction, or otherwise, in such manner as will best protect the interests of the United States in said canal, and will insure that the same will be kept open as such navigable highway, without further expense to the government: *Provided,* That the instruments and papers effecting such sale, in the manner aforesaid, shall be approved by the Attorney-General before the delivery thereof.

Stock of United States in Dismal Swamp Canal to be sold, and how.

Proviso.

Approved, July 25, 1866.

CHAP. 296.—An Act Making appropriations for sundry civil expenses of the Government for the year ending June thirtieth, eighteen hundred and sixty-seven, and for other purposes.

July 28, 1866.
Vol. 14, p. 310.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereafter expressed, for the fiscal year ending the thirtieth June, eighteen hundred and sixty-seven, viz:

SEC. 19. *And be it further enacted,* That the sum of eight thousand dollars is hereby appropriated, out of any money in the treasury not otherwise appropriated for the preservation of the harbor of Provincetown, Massachusetts, the same to be expended under the supervision of a commission or board of officers to be appointed by the Secretary of War.

Preservation of harbor of Provincetown, Mass.

Approved, July 28, 1866.

[No. 8.] A Resolution To provide for the removal of the wreck of the steamship Scotland.

Jan. 29, 1867.
Vol. 14, p. 564.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed to cause the removal of the wreck of the iron steamship Scotland, now on the bar outside of Sandy Hook, near the entrance to the harbor of New York, and the sum of one hundred thousand dollars, or so much thereof as may be necessary to complete said removal, is hereby appropriated, to be paid out of any money in the treasury not

[Repealed, act Mar. 16, 1867, c. 3.] Secretary of War may contract with lowest bidder for removal of wreck of steamship Scotland from entrance to New York Harbor.

Appropriation.
Advertisement.

Contract not to
exceed appropriation.

otherwise appropriated. The Secretary of War shall, after notice given in one or more newspapers in the cities of Philadelphia, New York, and Boston, receive sealed proposals for the removal of said wreck, and make contract for the same with the lowest bidder therefor. Said contract will in no case exceed in amount the sum herein appropriated.

Approved, January 29, 1867.

Mar. 2, 1867.
Vol. 14, p. 418.

CHAP. 144.—An Act Making appropriations for the repair, preservation, and completion of certain public works heretofore commenced under the authority of law, and for other purposes.

Public works
appropriation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and the same are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction and superintendence of the Secretary of War, for the repair, preservation, and completion of the following works heretofore commenced under the authority of law, and for the other purposes hereinafter named, that is to say:—

Examinations
and surveys.

For examination and survey of works of improvement for which appropriations have been heretofore made, and concerning which no sufficient information is now in possession of the department, and for examination and survey at other points in the fourth and fifth sections of this act specified, that is to say:

Atlantic coast.

On the Atlantic coast, thirty thousand dollars;

Pacific coast.

On the Pacific coast, twenty-five thousand dollars;

Northwestern
lakes.

On the northwestern lakes, seventy-five thousand dollars;

Western, etc.,
rivers.

On the western and northwestern rivers, one hundred and twenty-five thousand dollars.

Reexamina-
tions, etc., to be
made and plans
may be changed.

And the Secretary of War, when the public interests require it, shall cause examinations or re-examinations to be made, with suitable surveys, of the works aforesaid and all other works provided for by this act, and shall make such changes or modifications of the plans heretofore adopted for their improvement as shall be necessary and proper.

Other harbors
to be examined
to determine im-
provements re-
quired and cost.

And he shall cause such needful examination of other harbors and places in the fourth and fifth sections of this act specified, upon the sea and lake coasts and on western rivers, to be made as will enable him to determine what improvements thereof are required to render them safe and convenient for the navigation of the naval and commercial vessels of the United States, and the costs of such improvements; and he shall make full report thereof, and of the plans deemed advisable therefor, to Congress on the first Monday of December next, for such action as may be judged expedient and right. And if, upon such examina-

Report to Con-
gress.

tion and survey of works first herein named, being works now existing or in process of completion, and concerning which no information is now in the possession of the department, there shall remain an unexpended balance of appropriation, properly applicable thereto, from the sums herein appropriated, which may, in the judgment of the Secretary of War, be judiciously applied towards the economical and needful continuation or completion of such works, the Secretary of War shall direct such balance to be applied and used accordingly; but no moneys shall be used for such purposes, excepting from the balances remaining from appropriations herein made for the specific examination and survey of such works.

Balance of existing appropriations may be applied to continue, etc., such works when, etc.

For extending the pier at Erie harbor, Pennsylvania, and dredging channel through to outer bar, twenty-five thousand dollars. Erie Harbor.

For improvement at mouth of Conneaut river, Ohio, ten thousand dollars. Conneaut River.

For improvement at Ashtabula harbor, Ohio, fifty-four thousand dollars. Ashtabula.

For improvement of works at Grand River harbor, Ohio, sixty thousand dollars. Grand River (Fairport Harbor).

For improvement of Sandusky river, from Fremont to Lake Erie, in Ohio, twenty thousand dollars. Sandusky River.

For improvement of Maumee bay, Ohio, twenty thousand dollars. Maumee Bay (Toledo Harbor).

For improvement of St. Clair flats, in Michigan, one hundred and fifty thousand dollars, to be expended in accordance with the plans and specifications of Colonel T. J. Cram, in his report of December tenth, eighteen hundred and sixty-six. St. Clair flats.

For improvement at mouth of Saginaw river, Michigan, twenty-eight thousand dollars. Saginaw River.

For improvement of St. Mary's river, Michigan, fifty thousand dollars. St. Marys River.

For improving mouth of Au Sable river, Lake Huron, fifty thousand dollars. Au Sable River.

For improving Marquette harbor, Lake Superior, eighty-five thousand dollars. Marquette Harbor.

For improving Eagle harbor, Lake Superior, sixty-five thousand dollars. Eagle Harbor.

For improving harbor at Superior City, Wisconsin, sixty-three thousand dollars. Superior Harbor.

For improving harbor of Aux Becs Scies, Michigan, ten thousand dollars. Aux Becs Scies (Frankfort).

For improvement of Grand River harbor, Michigan, forty thousand dollars. Grand River (Grand Haven Harbor).

For improvement of Black Lake harbor, Michigan, fifty-one thousand dollars. Black Lake (Holland Harbor).

For improving harbor of St. Joseph, Michigan, twenty-three thousand dollars. St. Joseph.

For improving harbor at Racine, Wisconsin, forty-five thousand dollars. Racine.

- Sheboygan. For improving harbor of Sheboygan, Wisconsin, eight thousand dollars.
- Manitowoc. For improving harbor of Manitowoc, Wisconsin, forty-five thousand dollars.
- Green Bay. For improving harbor of Green Bay, Wisconsin, forty-five thousand dollars.
- Manistee. For improving harbor of Manistee, Michigan, sixty thousand dollars.
- White River (Lake). For improvement of White River harbor, Michigan, fifty-seven thousand dollars.
- Muskegon. For improvement of Muskegon harbor, Lake Michigan, fifty-nine thousand dollars.
- South Haven. For improving harbor of South Haven, Michigan, forty-three thousand dollars.
- New Buffalo. For improving harbor of New Buffalo, Michigan, sixty thousand dollars.
- Dunkirk. For improving harbor of Dunkirk, New York, one hundred thousand dollars.
- Buffalo. For improving harbor of Buffalo, New York, one hundred thousand dollars.
- Olcott. For improving harbor at Olcott, New York, at mouth of Eighteen-mile creek, sixty thousand dollars.
- Oak Orchard. For improvement at harbor of Oak Orchard, New York, eighty-seven thousand dollars.
- Great Sodus Bay. For improving harbor of Big Sodus bay, New York, eighty thousand dollars.
- Little Sodus Bay. For improving harbor of Little Sodus bay, New York, fifty thousand dollars.
- Oswego. For improving harbor at Oswego, New York, sixty thousand dollars.
- Plattsburg. For improving harbor of Plattsburg, New York, twenty-six thousand dollars.
- Kennebec River. For completing the improvement of the navigation of the Kennebec river, Maine, between Shepard's Point and Augusta, thirty thousand dollars.
- Ogdensburg. For improving harbor of Ogdensburg, New York, forty thousand dollars.
- Burlington. For improving the harbor at Burlington, Vermont, eighty thousand dollars.
- Thames River. For improvement of Thames river, Connecticut, thirty-six thousand dollars.
- St. Croix River. For the purpose of improving the navigation of the St. Croix river, Maine, above the ledge, fifteen thousand dollars: *Provided*, The province of New Brunswick shall contribute and pay to the proper disbursing officer a like sum for said purpose, said payment being made on condition that in no event shall the province of New Brunswick be called upon for more than half the sum actually expended for said purpose.
- Province of New Brunswick to pay like sum, etc.
- Hudson River. For improvement of Hudson river, New York, from Troy to Baltimore, three hundred and five thousand one hundred and eighty-eight dollars.
- Marcushook. For improving harbor of Marcus Hook, Pennsylvania, ninety-four thousand dollars.

For improvement of Chester harbor, Pennsylvania, eleven thousand dollars. Chester Harbor.

For improvement of Delaware breakwater, Delaware bay, one hundred and nine thousand four hundred and ninety-three dollars and seventy cents. Delaware Breakwater.

For improvement of Patapsco river, Maryland, seventy-five thousand dollars. Patapsco River

For improvement of mouth of Mississippi river, two hundred thousand dollars. Mouth of Mississippi River.
Res. No. 21, Mar. 29, 1867.

For improvements of Ohio river, one hundred thousand dollars. Ohio River.

For improvement of Saco river, Maine, forty thousand dollars. Saco River.

For preservation and improvement of Boston Harbor, Massachusetts, three hundred and seventy-five thousand dollars. Boston Harbor.

For improving navigation on the Mississippi river at Des Moines or Lower rapids, according to such plan as the Secretary of War shall on the report of a board of engineers approve, five hundred thousand dollars: *Provided, however,* That any canal that may be constructed around said Des Moines or Lower rapids of the Mississippi river shall be and forever remain free to the navigation and commerce of said river; and no tolls shall ever be collected thereon. Improving navigation of Mississippi River at Des Moines.

For improving navigation on the Mississippi river at Des Moines or Lower rapids, according to such plan as the Secretary of War shall on the report of a board of engineers approve, five hundred thousand dollars: *Provided, however,* That any canal that may be constructed around said Des Moines or Lower rapids of the Mississippi river shall be and forever remain free to the navigation and commerce of said river; and no tolls shall ever be collected thereon. Canal to be free of tolls.

For improving navigation of Mississippi river at Rock Island rapids, two hundred thousand dollars. Rock Island Rapids.

For improving harbor of Ontonagon, Michigan, ninety-seven thousand six hundred dollars. Ontonagon Harbor.

For building and operating two dredges and snag-boats, to be used on the Mississippi river between Fort Snelling and Rock Island rapids, ninety-six thousand dollars. Dredges and snag boats on Mississippi River.

For building and operating one dredge or snag-boat on the Wisconsin river, forty thousand dollars. Wisconsin River.

For improving harbor of Pentwater, Lake Michigan, fifty-five thousand dollars. Harbor of Pentwater.

For improving harbor of Pere Marquette, Lake Michigan, fifty thousand dollars. Pere Marquette (Ludington Harbor).

To improve the navigation of the Willamette river, Oregon, below the city of Portland, thirty thousand dollars. Willamette River.

For removing snags and boulders throughout the Minnesota river, thirty-seven thousand five hundred dollars. Snags, etc., in Minnesota River.

For improvement of Providence river, Rhode Island, off Pawtuxet bar, and at the Crook, twenty-five thousand dollars. Providence River.

For improvement of the Pawtucket river, Rhode Island, seventeen thousand dollars. Pawtucket River.

SEC. 2. *And be it further enacted,* That the appropriation of seventy-five thousand dollars for constructing works, and improving the entrance into the harbor of Michigan City, Indiana, made in, and by the act approved June twenty-third, eighteen hundred and sixty-six, shall be Former appropriation for harbor at Michigan City, how to be expended.
1866, c. 138.

Double amount
must have been
expended by
Michigan City
Harbor Co.

Vessels not sub-
ject to toll.

Appropriations
so applied as to
complete works.

For other pur-
poses than for ex-
aminations, etc.,
by contract.

How to be ex-
pended when
work can not be
subject of con-
tract.

Contracts not
to be made until,
etc.

Secretary of
War to report
results of surveys
to Congress with
plans, etc.

Report to state
what.

Vols. 14, p. 73;
26, p. 766.
Ante, p. 155;
post, p. 607.

Continued
until works are
completed.

Separate pro-
posals and con-
tracts for each
work and each
class of works,
etc.

Disbursing offi-
cers, except, etc.,
to give bonds.

expended for the purposes aforesaid, upon the terms and in the manner hereinafter provided for other appropriations under this act: *Provided*, That it shall be first shown to the satisfaction of the Secretary of War that the sum of one hundred thousand dollars has been expended by the Michigan City Harbor Company in the construction of a safe and convenient harbor at that place: *And provided*, That the passage of vessels to and from said harbor shall be free, and not subject to toll or charge, and the money appropriated by this act shall be so applied as to complete or make the nearest approximation to completing the work for which each specific appropriation is made; and it shall be the duty of the Secretary of War to apply the sums herein appropriated for other purposes than for examinations and surveys by contract: *Provided, however*, That when, from the nature of the work to be done, the same cannot, in the judgment of the Secretary, be made the subject of contract, the necessary expenditure may be otherwise ordered: *Provided*, That no contract shall be made except after public advertisement for proposals, in such form and manner as to secure general notice thereof, and the same shall only be made with the lowest responsible bidder therefor, upon security deemed sufficient in the judgment of the Secretary. And it shall be the duty of the said Secretary, at the earliest practicable time, to report to Congress the result of any survey or resurvey, with the plan adopted and the items of expenditure under said plan; and he shall make report of all action taken under the provisions of this act, and he shall accompany said report with a statement of the amount and date of all former appropriations for each work, and a full estimate for its entire and permanent completion, with the amount that can be profitably expended in the next fiscal year; and he shall also state in what collection district each work is located, and at or near what port of entry, lighthouse, or port, what amount of revenue was collected at the nearest port of entry for the last fiscal year, and, as far as practicable, what amount of commerce and navigation would be benefited by the completion of each particular work: *Provided*, That he shall continue to make such a report the first Monday of December, annually, until the works herein provided for shall be completed.

SEC. 3. *And be it further enacted*, That whenever the Secretary of War shall invite proposals for any works, or for any material or labor for any works, there shall be separate proposals and separate contracts for each work, and also for each class of material or labor for each work, and he shall report to Congress, on the first Monday of December next, all the bids with the names of the bidders. All persons not holding commissions in the regular army of the United States, who shall be intrusted with the disbursement of the funds appropriated for the works named in this act, shall be required to give bond and ample security for the faith-

ful application of the same, and no such disbursing officer in the army of the United States shall receive any commission or compensation for making such disbursements. And the moneys hereinbefore appropriated shall remain and be at the disposal of the Secretary of War, and subject to his control for the purposes named in this act, until the several works and improvements herein provided for are completed, any law or regulation to the contrary notwithstanding.

SEC. 4. *And be it further enacted*, That the Secretary of War is hereby directed to cause examinations or surveys, or both, as aforesaid, to be made at the following points, namely:

At the harbor of San Francisco, California, with a view to the removal of "Blossom Rock," if the same should be found necessary and essential to commerce;

At Crescent city harbor, California;

At Duxbury beach, Massachusetts;

At mouth of Menomonee river, Green Bay;

At Saugatuck harbor, mouth of Kal[a]mazoo river, in Michigan;

At Port Clinton, in Ohio;

At Pultneyville, Lake Ontario, New York;

And of the Tennessee river, from Chattanooga to its mouth;

At Reedy Island and Liston (tree) Point, in the Delaware river and bay;

At Richmond's Island, Cape Elizabeth, the Union river and the Gut^a opposite the city of Bath, Maine;

The Connecticut river, between Hartford and its mouth;

At Block Island, in the State of Rhode Island, the reefs in Lake Michigan, near the harbor of Racine, in Wisconsin, with a view to a lighthouse and breakwater thereon;

And the Potomac river, in the District of Columbia.

SEC. 5. *And be it further enacted*, That the Secretary of War is hereby directed to cause a continuance of examinations or surveys, or both, at the following points, namely:

Of the Mississippi river, above the falls of Saint Anthony and between the Falls of Saint Anthony and Rock Island rapids;

Of the Wisconsin river,

And to continue the survey of the Illinois river, in accordance with the recommendation of General J. H. Wilson, in his report of January twelve, eighteen hundred and sixty-seven.

And he is also directed to cause plans and estimates to be made of the most practicable and effective mode of improving the harbor at Galveston, Texas, and of erecting suitable breakwater at that point.

Approved, March 2, 1867.

^a The Gut is a part of the Sasanoa (or Back) River.

Mar. 2, 1867.
Vol. 14, p. 468.

CHAP. 168.—An Act Making appropriations and to supply deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirtieth, eighteen hundred and sixty-seven, and for other purposes.

Deficiency appropriations for year ending June 30, 1867.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums, or so much thereof as may be necessary, be, and the same are hereby, appropriated for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and sixty-seven, namely:—

* * * * *

Westport Harbor.

Miscellaneous.—For deepening and improving Westport harbor, Connecticut, twenty-five hundred dollars.

Thames River.

For dredging and maintaining the channel of the river Thames near Norwich, in the State of Connecticut, to complete the work, thirty-six thousand dollars.

* * * * *

Approved, March 2, 1867.

Mar. 12, 1867.
Vol. 15, p. 20.

[No. 2.] A Resolution Extending the time for the completion of the improvement of the Fox and Wisconsin rivers.

Time for completion of improvement of Fox and Wisconsin rivers extended.
1846, c. 170, § 8;
c. 9, p. 83.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the time provided for the completion of the improvement of the Fox and Wisconsin rivers, and a canal connecting the same, by section three of an act of Congress, approved August eighth, eighteen hundred and forty-six, entitled, "An act to grant a certain quantity of land to aid in the improvement of the Fox and Wisconsin rivers, and to connect the same by a canal in the Territory of Wisconsin," be, and the same hereby is, extended for the term of five years from and after the approval of this resolution, with all the rights and privileges conferred by said act.

Approved, March 12, 1867.

Mar. 16, 1867.
Vol. 15, p. 1.

CHAP. 3.—An Act To repeal a joint resolution entitled "A resolution to provide for the removal of the wreck of the steamship "Scotland," approved January twenty-ninth, eighteen hundred and sixty-seven.

Resolution for removal of wreck of steamship Scotland from entrance to New York Harbor repealed.

1867, Res. No. 8.
Res. No. 16,
Mar. 2, 1868.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the joint resolution entitled "A resolution to provide for the removal of the wreck of the steamship Scotland," approved January twenty-ninth, eighteen hundred and sixty seven, be, and the same is hereby, repealed.

Approved, March 16, 1867.

[No. 9.] A Resolution Providing for the necessary surveys for a ship canal between Lake Erie and Lake Ontario, for military, naval, and commercial purposes.

Mar. 22, 1867.

Vol. 15, p. 21.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed to cause surveys, with plans and estimates of cost, to be made by an officer of engineers for a ship canal to connect lakes Erie and Ontario, or the navigable waters thereof, of suitable location and dimensions for military, naval, and commercial purposes, and that the expenses of the same be defrayed from the sums appropriated in the acts of June twenty-three, eighteen hundred and sixty-six, and March two, eighteen hundred and sixty-seven, for examinations and surveys relating to the improvement of harbors and rivers on the northwestern lakes.

Surveys, plans, and estimates to be made for ship canal to connect lakes Erie and Ontario.

1866, c. 138;
1867, c. 144.

Approved, March 22, 1867.

[No. 20.] Joint Resolution Providing for the necessary surveys for a ship canal around the Falls of the Ohio River, for military, naval, and commercial purposes.

Mar 29, 1867.

Vol. 15, p. 25.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed to cause surveys, with plans and estimates of cost, to be made by an officer of engineers, for a ship canal around the falls of the Ohio river on the Indiana side thereof, of suitable location and dimensions for military, naval, and commercial purposes; and also to cause said officer to estimate the expense of completing the Louisville and Portland canal, on the Kentucky side of said falls, according to the plan on which the said canal company is now progressing with said work, and that the expenses of both be defrayed from the sums appropriated in the acts of June twenty-three, eighteen hundred and sixty-six, and March two, eighteen hundred and sixty-seven, for examination and surveys relating to the improvement of harbors and rivers on the northwestern lakes.

Surveys, plans, and estimates to be made for ship canal around Falls of the Ohio River.

Expense of completing Louisville and Portland Canal to be estimated.

1866, c. 138;
1867, c. 144.

Approved, March 29, 1867.

[No. 21.] Joint Resolution To authorize the Secretary of War to build dredge boats for use at the mouth of the Mississippi River.

Mar. 29, 1867.

Vol. 15, p. 25.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and is hereby, authorized, on the recommendation of the engineer department, to build and operate two dredge boats for the purpose of deepening and keeping open the channel of one or more of the passes at the mouth of the Mississippi, and to expend for that purpose so much as may be necessary of the appropriation for

Secretary of War to build and operate two dredge boats, to keep open channel of one or more of passes at mouth of Mississippi River.
1867, c. 144.

the improvement of the mouth of the Mississippi river, provided for in the "Act making appropriations for the repair, preservation, and completion of certain public works heretofore commenced under the authority of law, and for other purposes," approved March second, eighteen hundred and sixty-seven.

Approved, March 29, 1867.

Mar. 29, 1867.
Vol. 15, p. 28.

[No. 27.] A Resolution In relation to the execution of surveys of rivers ordered by Congress.

Chief of Engineers may employ not exceeding 5 civil engineers to make surveys, etc., of western and northwestern rivers.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the chief of engineers may, with the approval of the Secretary of War, employ such civil engineers, not exceeding five in number, for the purpose of executing the surveys and improvements of western and northwestern rivers, ordered by Congress, as may be necessary to the proper and diligent prosecution of the same, and the persons so employed may be allowed a reasonable compensation for their services, not to exceed the sum of three thousand dollars per annum.

Compensation.

Approved, March 29, 1867.

Jan. 11, 1868.
Vol. 15, p. 246.

[No. 4.] Joint Resolution In relation to the sale of stocks in the Dismal Swamp Canal Company.

Sale of stock owned by United States in Dismal Swamp Canal Co. adjourned.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be directed to adjourn the sale of eight hundred shares of the stock owned by the United States in the Dismal Swamp Canal Company from the second day of January, eighteen hundred and sixty-eight, (to which day said sale now stands adjourned,) until Saturday, the eighth day of February, eighteen hundred and sixty-eight, at eleven o'clock, A. M.

Approved, January 11, 1868.

Mar. 2, 1868.
Vol. 15, p. 249.

[No. 16.] A Resolution Authorizing the Lighthouse Board to place warnings over obstructions at the entrance of harbors, or in the fairway of bays and sounds, and for other purposes.

Commission to examine wreck of steamship Scotland.

1867, c. 3.
Act July 25, 1868, c. 233.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, * * * SEC. 2. *And be it further resolved,* That the Secretary of War is hereby directed to appoint a board of competent engineers, to consist of not less than three persons, to examine the condition of the wreck of the steamer Scotland, now in the waters of the harbor of the city of New York,

and ascertain whether the same is dangerous to navigation, and to report thereon at as early a day as practicable, with a particular estimate of the cost of the removal of said wreck.

Approved, March 2, 1868.

[No. 31.] Joint Resolution In relation to the breakwater at Portland, Maine.

June 5, 1868.
Vol. 15, p. 252.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the unexpended balance of the appropriation for the breakwater in Portland harbor, Maine, as the chief engineer shall deem proper, may be expended under his direction in excavating the "middle ground" near said breakwater, and in otherwise protecting the channel from injury by filling and improving the same.

Appropriation for breakwater at Portland, Me., how expended.

Approved, June 5, 1868.

CHAP. 184.—An Act To aid the improvement of the Des Moines and Rock Island Rapids, in the Mississippi River.

July 20, 1868.
Vol. 15, p. 124.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That whenever in the prosecution of the improvements of the Mississippi River, at either the Des Moines or Rock Island rapids therein, it becomes necessary or proper to take possession of the right of way over any lands, or to use any earth, quarries, or other material lying adjacent or near to either of said works, and needful for its prosecution, the officer in charge of said work, or his assistant, may, in the name of the United States, take possession of and use the same, after having first paid, or secured to be paid, the value thereof, which may have been ascertained in the mode provided by the laws of the State wherein such property or material lie[s], for adjudging the value of private property which may be needed for any public improvement: *Provided, however,* That when the owner of such property or material shall fix a price for the same, which, in the opinion of the said officer in charge, shall be reasonable, he may take the same at such price without further delay.

Right of way, materials, etc., may be taken in making improvements at Des Moines or Rock Island Rapids.

Value to be first paid or secured.

Proviso.

SEC. 2. *And be it further enacted,* That a portion of the appropriations made or to be made for the prosecution of the improvements aforesaid, not exceeding fifty thousand dollars in amount, may be applied in payment of the property or material taken and used as aforesaid.

Part of appropriation may be applied, etc.

Approved, July 20, 1868.

July 23, 1868.

Vol. 15, p. 169.

CHAP. 228.—An Act Making a grant of land to the State of Minnesota, to aid in the improvement of the navigation of the Mississippi River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

Land grant to Minnesota to build lock and dam to aid navigation of Mississippi River.

1873, c. 233.

Land, how to be selected.

Not to be from certain lands.

How to be disposed of.

Lock and dam to be public highway.

Work, how to be performed.

Lands to revert to United States if, etc.

Lands, when to be open to actual settlers, and on what terms.

If sufficient appropriation is made to complete the dam, lands to revert.

there be, and hereby is, granted to the State of Minnesota, for the purpose of aiding said State in constructing and completing a lock and dam at Meeker's Island, (so called,) in the Mississippi River, in said State, and thereby facilitating the navigation of the Mississippi River between the falls of St. Anthony and the mouth of the Minnesota River, two hundred thousand acres of public lands, to be selected in alternate odd-numbered sections by an agent to be appointed by the governor of said State, subject to the approval of the Secretary of the Interior: *Provided*, That said lands shall be selected from the public lands lying within the limits of the said State of Minnesota, and that not more than one section thereof shall be selected in any one township: *Provided further*, That said selections shall not be made from any lands containing mines of gold, silver, cinabar, or copper, nor from any lands to which rights of pre-emption or homestead have attached.

SEC. 2. *And be it further enacted*, That said lands so granted shall be subject to the disposal of the legislature of said State for the purposes mentioned in the first section of this act, and no other; and the said lock and dam shall be and remain forever a public highway, free from any toll or charge of any kind whatever; and the said legislature shall have power to pass all needful rules and regulations that may be necessary to fully carry out the purposes of this act.

SEC. 3. *And be it further enacted*, That the work shall be done under the direction of the engineer department of the United States, according to the plan and estimate submitted by Major-General Warren, and that if said lock and dam are not constructed within two years from and after the date of the acceptance and disposition of this grant by the legislature of the said State, the lands hereby granted shall revert to the United States.

SEC. 4. *And be it further enacted*, That at any time after the selection of the said lands, and subsequent to the completion of said lock and dam, the lands hereby granted shall be open for settlement by actual settlers upon paying to the State of Minnesota a price not exceeding one dollar and twenty-five cents per acre for the same, which shall be paid by the State to the company who may construct said lock and dam.

SEC. 5. *And be it further enacted*, That if at any time prior to the completion of the said lock and dam the government of the United States shall make an appropriation in money sufficient to construct said lock and dam, then the grant of lands herein made shall revert to the United

States: *Provided*, That this act shall have no effect on lands already granted for railroad purposes. *Proviso.*

Approved, July 23, 1868.

CHAP. 233.—An Act Making appropriations and to supply deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirtieth, eighteen hundred and sixty-eight, and for other purposes.

July 25, 1868.
Vol. 15, p. 171.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums, or so much thereof as may be necessary, be, and the same are hereby, appropriated for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and sixty-eight, viz.—

* * * * *

War Department.— * * *

For the repair, preservation, extension, and completion of certain public works on rivers and harbors, to be expended under the direction of the Secretary of War, one million five hundred thousand dollars: *Provided*, That said expenditures shall not be applied to any works not mentioned in the bill [a] “making appropriations for repairs, preservation, and completion of certain public works, and for other purposes,” which passed the House of Representatives June thirtieth, eighteen hundred and sixty-eight.

Repair, etc., of public works on rivers and harbors.

Proviso.

One hundred thousand dollars, or so much thereof as may be necessary, to be expended under the direction of the Secretary of War in the removal of the wreck of the iron steamship “Scotland,” now on the bar outside of Sandy Hook, near the entrance to the harbor of New York: *Provided*, That the Secretary of War shall, after notice given in one or more newspapers in the cities of Philadelphia, New York, and Boston, receive sealed proposals for the removal of said wreck, and make contract for the same with the lowest bidder therefor. Said contract will in no case exceed in amount the sum herein appropriated.

Removal of iron steamship Scotland, in New York Harbor.
Res. No. 16,
Mar. 2, 1868.

Proposals therefor to be advertised for.

For the removal of a sunken rock in the channel of the harbor at the port of New York, fifteen hundred and thirty dollars.

Removal of sunken rock in channel of New York Harbor.

* * * * *

Approved, July 25, 1868.

^a The bill is printed immediately following this act. For statement showing allotment of funds under the appropriation see page 175.

HOUSE BILL REFERRED TO IN THE FOREGOING ACT, APPROVED JULY 25,
1868.

40TH CONGRESS }
2d Session. }

H. R. 1046.

IN THE SENATE OF THE UNITED STATES.

JULY 1, 1868.

Read twice and referred to the Committee on Commerce.

AN ACT

Making appropriations for the repair, preservation, and completion of certain public works, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended under the direction and superintendence of the Secretary of War, for the repair, preservation, and completion of the following works heretofore commenced under the authority of law, and for the other purposes hereinafter named—that is to say:

For improvement of Superior City harbor, in the State of Wisconsin, thirty thousand dollars.

For improvement of Wisconsin river, forty thousand dollars.

For improvement of Ontonagon harbor, Lake Superior, twenty thousand dollars.

For improvement of Eagle harbor, Lake Superior, twenty thousand dollars.

For improvement of Marquette harbor, Lake Superior, twenty thousand dollars.

For improvement of Green Bay harbor, Wisconsin, thirty-five thousand dollars.

For improvement of Chippewa river, five thousand dollars.

For improvement of Monitowoc harbor, Wisconsin, thirty-five thousand dollars.

For improvement of Saint Croix river, five thousand dollars.

For improvement of Sheboygan harbor, Wisconsin, twenty thousand dollars.

For improvement of Milwaukee harbor, Wisconsin, twenty-five thousand dollars.

For improvement of Racine harbor, Wisconsin, twenty thousand dollars.

For improvement of Kenosha harbor, Wisconsin, twenty thousand dollars.

For improvement of harbor of Chicago, Illinois, forty-eight thousand dollars.

For improvement of Michigan City harbor, Indiana, thirty-five thousand dollars.

For improvement of harbor of Saint Joseph, Michigan, twenty thousand dollars.

For improvement of South Haven harbor, Michigan, twenty thousand dollars.

For improvement of Grand Haven harbor, Michigan, twenty thousand dollars.

For improvement of Muskegon harbor, Michigan, ten thousand dollars.

For improvement of White River harbor, Michigan, seventy-five thousand dollars.

For improvement of Pentwater harbor, Michigan, twenty-five thousand dollars.

For improvement of Pere Marquette harbor, Michigan, twenty thousand dollars.

For improvement of Manistee harbor, Michigan, twenty-five thousand dollars.

For improvement of harbor at Aux Becs Scies, Michigan, ten thousand dollars.

For improvement of Saugatuck harbor, Michigan, thirty thousand dollars.

For improvement of the Saint Mary's river, Michigan, twenty thousand dollars.

For improvement of Au Sable river, Lake Huron, Michigan, twenty thousand dollars.

For improvement of Saint Clair Flats, Lake Saint Clair, two hundred thousand dollars.

For improvement of Sandusky river, Ohio, fifteen thousand dollars.

For improvement of Harbor at Cleveland, Ohio, twenty thousand dollars.

For improvement of Conneaut harbor, Ohio, eleven thousand dollars.

For improvement of Erie harbor, Pennsylvania, fifty thousand dollars.

For improvement of harbor at Dunkirk, New York, twenty-five thousand dollars.

For improvement of harbor at Buffalo, New York, fifty thousand dollars.

For improvement of Olcott harbor, New York, twenty thousand dollars.

For improvement of harbor at Charlotte, New York, ten thousand dollars.

For improvement of harbor at Little Sodus, New York, ten thousand dollars.

For improvement of Oswego harbor, New York, sixty thousand dollars.

For improvement of the harbor at Wilson, Niagara county, New York, ten thousand dollars.

For improvement of Plattsburg harbor, New York, ten thousand dollars.

For improvement of harbor at Whitehall, New York, ten thousand dollars.

To improve the Tennessee river from its mouth to Florence, Alabama, fifteen thousand dollars.

To improve the river from Chattanooga, Tennessee, to Decatur, Alabama, ninety thousand dollars.

For improvement of harbor at Burlington, Vermont, forty thousand dollars.

For improvement of the Upper Mississippi river, and removing snags and dredging, sixty thousand dollars.

For construction of dam and lock at Little Falls, Minnesota river, thirty thousand dollars.

For improvement of the Des Moines rapids, nine hundred thousand dollars.

For improvement of the Rock Island rapids, two hundred thousand dollars.

For improvement of the mouth of the Mississippi river, one hundred thousand dollars.

For improvement of the Mississippi, Missouri, and Arkansas rivers, one hundred and eighty-five thousand dollars.

For improvement of the Upper Missouri river, sixty thousand dollars.

For improvement of the Illinois river, from its mouth toward La Salle, one hundred thousand dollars.

For improvement of the Ohio river, two hundred and fifty thousand dollars, of which a sum not exceeding eighteen thousand dollars may be applied under the direction of the Secretary of War, in experimenting upon and testing the value of shifting sluices and their applicability to said improvement.

For improvement of the Patapsco river, below Fort McHenry, thirty thousand dollars.

For improvement of the Susquehanna river, ten thousand dollars.

For improvement of the Hudson river, New York, one hundred thousand dollars.

For removing obstructions in East river, including Hell Gate, three hundred thousand dollars.

For improvement of Westport harbor, Connecticut, ten thousand dollars.

For improvement of Connecticut river, Connecticut, twenty thousand dollars.

For removal of Middle Rock, New Haven, Connecticut, fifteen thousand dollars.

For improvement of Pawtucket harbor, eight thousand dollars.

For improvement of Plymouth harbor, Massachusetts, fifteen thousand dollars.

For construction and preservation of sea-walls at Great Brewster island, ten thousand dollars.

For building walls and improvements at Deer and Lovell's islands, in Boston harbor, ten thousand dollars.

For preservation and improvement of Boston harbor, one hundred thousand dollars.

For improvement of Taunton river, Massachusetts, thirteen thousand dollars.

For completion of the breakwater connecting Richmond island and Cape Elizabeth, Maine, twenty thousand dollars.

For improvement of Saco river, Maine, twenty thousand dollars.

For improvement of Kennebec river, Maine, three thousand dollars.

For improvement of Penobscot river, Maine, thirty thousand dollars.

For improvement of navigation at the "Gut," opposite Bath, Maine, sixteen thousand five hundred dollars.

For improvement of Union river, Maine, twenty thousand dollars.

For construction of breakwater at Block Island, Rhode Island, seventy-four thousand dollars.

For improvement of Willamette river, Oregon, twenty-five thousand dollars.

For removal of Blossom Rock, in the harbor of San Francisco, sixty thousand dollars.

For survey of Northwestern lakes, seventy-five thousand dollars.

For examination and surveys on western and northwestern rivers, one hundred and twenty-five thousand dollars.

For examination and surveys on the Atlantic coast, thirty thousand dollars.

For examination and surveys on the Pacific coast, twenty-five thousand dollars.

For purchase and repair of instruments, five thousand dollars.

* * * * *

Sec. 3. *And be it further enacted*, That the sum of four hundred and fifty thousand dollars is hereby appropriated toward completing the Louisville and Portland canal, in accordance with the plans and estimates made in the report of General Godfrey Weitzel, * * *

* * * * *

Passed the House of Representatives June 30, 1868.

Attest:

EDWARD MCPHERSON, *Clerk.*
By CLINTON LLOYD, *Chief Clerk.*

Statement showing the works of river and harbor improvement to which the appropriation of \$1,500,000 made by the foregoing act, approved July 25, 1868, was distributed, and the amount allotted to each work.

Arkansas River.....	\$20, 000
Baltimore Harbor (Patapsco River), Maryland.....	17, 000
Blossom Rock, San Francisco Harbor, California.....	50, 000
Boston Harbor, Massachusetts.....	43, 000
Charlotte Harbor (Genesee River), New York.....	1, 100
Chicago Harbor, Illinois.....	35, 000
Cleveland Harbor, Ohio.....	17, 000
Des Moines Rapids, Mississippi River.....	300, 000
East River, New York, removal of obstructions.....	85, 000
Erie Harbor, Pennsylvania.....	40, 000
Falls of the Ohio River.....	85, 000
Frankfort (Aux Becs Scies) Harbor, Michigan.....	10, 000
Green Bay Harbor (Fox River), Wisconsin.....	17, 500
Hudson River, New York.....	85, 000
Manitowoc Harbor, Wisconsin.....	17, 500
Michigan City Harbor, Indiana.....	25, 000
Mississippi River.....	40, 000
Missouri River.....	25, 000
Mouth of the Mississippi River.....	50, 000
Ohio River.....	85, 000
Oswego Harbor, New York.....	20, 000
Rock Island Rapids, Mississippi River.....	156, 000
Saco River, Maine.....	20, 000
Saginaw River, Michigan.....	9, 000
St. Clair Flats Canal, Michigan.....	86, 000
Saugatuck Harbor, Michigan.....	23, 900
Susquehanna River, below Havre de Grace, Md.....	5, 000
Tennessee River from its mouth to Florence, and from Chattanooga to Decatur, Alabama.....	85, 000
Upper Mississippi River, snag boats and dredge boats.....	26, 000
Willamette River below Portland, Oreg.....	21, 000
Total.....	1, 500, 000

[No. 76.] Joint Resolution In relation to surveys and examinations of rivers and harbors.

July 27, 1868.

Vol. 15, p. 262.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War shall cause to be prepared and submitted to Congress, in connection with the reports of examinations and surveys of rivers and harbors hereafter made by order of Congress, full statements of all existing facts tending to show to what extent the general commerce of the country will be promoted by the several works of improvements contemplated by such examinations and surveys, to the end that public moneys shall not be applied excepting where such improvements shall tend to subserve the general commercial and navigation interests of the United States.

Secretary of War to state to Congress certain facts, with reports of examinations, etc., of rivers, etc.

Approved, July 27, 1868.

July 27, 1868.
Vol. 15, p. 263.

[No. 80.] Joint Resolution Giving the assent of the United States to the construction of certain wharves in the harbor of Oswego, New York.

Preamble.

WHEREAS the common council of the city of Oswego, in the State of New York, by resolutions unanimously adopted April seventh, eighteen hundred and sixty-eight, and May twelfth, eighteen hundred and sixty-eight, in pursuance of the authority granted them by the legislature of New York in the charter of said city, have given permission to the owners of lots eleven and twelve, also of lots thirteen, fourteen, eighty-one, and eighty-two, and of lots fifteen, sixteen, seventeen, and eighteen, in fortification block number two, in the first ward of said city, to construct wharves in front of said lots, seventy feet in width, and extending northerly so that the north end of said wharves may be on a line with the north line of the Ontario elevator pier, but not less than two hundred and fifty feet distant from the nearest point of the United States pier, which wharves will extend into the navigable waters of said harbor: Therefore,

Assent by Congress to owners of lots in Oswego, N. Y., to construct wharves.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of the United States be, and the same is hereby, given, so far as Congress has power to give the same, to the owners of the lots above mentioned, to construct said wharves in accordance with the terms of said resolutions, subject, however, to the approval of the engineer department of the army.

Approved, July 27, 1868.

Apr. 10, 1869.
Vol. 16, p. 44.

CHAP. 19.—An Act Making an appropriation for the improvement of rivers and harbors for the fiscal year ending June thirtieth, eighteen hundred and sixty-nine, and the year ending June thirtieth, eighteen hundred and seventy.

Appropriation for repair, preservation, etc., of works for rivers and harbors.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of two million dollars [^a] is hereby appropriated for the fiscal year ending June thirty, eighteen hundred and sixty-nine, and the year ending June thirty, eighteen hundred and seventy, to be expended for the repair, extension, preservation, and completion of works for the improvement of rivers and harbors under the direction of the Secretary of War: *Provided*, That the Secretary of War is hereby authorized to cause such expenditures to be made so as best to subserve the interests of commerce; and he is required to report to Congress, at the opening of its December session, all expenditures made under the provisions of this act up to that time in detail.

How to be expended.

Report to Congress at December session.

Approved, April 10, 1869.

^a For statement showing allotment of funds under this appropriation see page 177.

Statement showing the works of river and harbor improvement to which the appropriation of \$2,000,000 made by the foregoing act, approved April 10, 1869, was distributed, and the amount allotted to each work.

Au Sable Harbor, Michigan	\$2, 970. 00
Baltimore Harbor (Patapsco River), Maryland	26, 730. 00
Blossom rock, San Francisco Harbor, California	29, 927. 27
Boston Harbor, Massachusetts	82, 170. 00
Buffalo Harbor, New York	89, 100. 00
Charlotte Harbor (Genesee River), New York	1, 000. 00
Chicago Harbor, Illinois	29, 700. 00
Cleveland Harbor, Ohio	13, 380. 00
Conneaut Harbor, Ohio	8, 910. 00
Des Moines Rapids, Mississippi River	178, 200. 00
Dunkirk Harbor, New York	2, 000. 00
East River, New York	178, 200. 00
Erie Harbor, Pennsylvania	22, 275. 00
Falls of the Ohio River	178, 200. 00
Frankfort (Aux Becs Scies) Harbor, Michigan	29, 318. 85
Grand Haven Harbor, Michigan	1, 866. 15
Great Brewster Island, Boston Harbor, Massachusetts ..	24, 750. 00
Green Bay Harbor, Wisconsin	44, 550. 00
Hudson River, New York	89, 100. 00
Illinois River, Illinois	84, 150. 00
Kennebec River, Maine	14, 850. 00
Kenosha Harbor, Wisconsin	5, 346. 00
Little Sodus Bay, New York	1, 500. 00
Manitowoc Harbor, Wisconsin	17, 820. 00
Marquette Harbor, Michigan	26, 730. 00
Maumee Bay (Toledo Harbor), Ohio	29, 700. 00
Michigan City Harbor, Indiana	31, 185. 00
Milwaukee Harbor, Wisconsin	35, 640. 00
Mouth of the Mississippi River	85, 181. 00
Oswego Harbor, New York	22, 275. 00
Pentwater Harbor, Michigan	17, 820. 00
Pere Marquette (Ludington) Harbor, Michigan	31, 185. 00
Provincetown Harbor, Massachusetts	8, 910. 00
Racine Harbor, Wisconsin	22, 275. 00
Rock Island Rapids, Mississippi River	133, 650. 00
Saco River, Maine	22, 275. 00
St. Clair Flats Canal, Michigan	142, 560. 00
St. Marys River, Michigan	10, 692. 00
Saugatuck Harbor, Michigan	6, 039. 00
Sheboygan Harbor, Wisconsin	14, 850. 00
Superior Harbor, Wisconsin	44, 550. 00
Susquehanna River below Havre de Grace, Maryland ..	990. 00
Tennessee River above Chattanooga, Tennessee	35, 000. 00
Tennessee River below Chattanooga, Tennessee	5, 095. 00
Upper Mississippi River, snag boats and dredge boats ..	35, 640. 00
White Lake Harbor, Michigan	44, 550. 00
Willamette River below Portland, Oregon	13, 365. 00
Balance	[a] 23, 829. 73
Total	2, 000, 000. 00

^a It is not known to what works the expenditure of this balance was applied.

Apr. 10, 1869.
Vol. 16, p. 55.

[No. 16.] A Resolution Extending the time for the completion of the Portage Lake and Lake Superior Ship Canal.

Time for completing Portage Lake and Lake Superior Ship Canal extended. 1865, c. 102; 1866, c. 161; 1871, Res. No. 47; 1872, c. 66; 1873, c. 323.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the time for the completion of the Portage Lake and Lake Superior ship canal be, and the same is hereby, extended to the third day of March, eighteen hundred and seventy-one.

Approved, April 10, 1869.

Dec. 23, 1869.
Vol. 16, p. 61.

CHAP. 5.—An Act Making a temporary appropriation for the prosecution of the work upon the improvement of the Des Moines Rapids in the Mississippi River.

Appropriation for improvement of Des Moines Rapids.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction and superintendence of the Secretary of War, for the purpose of continuing the prosecution of the work upon the improvement of the Des Moines rapids in the Mississippi River, the sum of two hundred thousand dollars.

Approved, December 23, 1869.

Jan. 20, 1870.
Vol. 16, p. 61.

CHAP. 7.—An Act Repealing so much of the Act of August eighth, one thousand eight hundred and forty six, as declared the Des Moines River, in the then Territory of Iowa, a public highway.

Repeal of act making Des Moines River a public highway. 1846, c. 103.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the Act of August eighth, one thousand eight hundred and forty-six, entitled "An act granting certain lands to the Territory of Iowa to aid in the improvement of the navigation of the Des Moines river, in said Territory," as makes said river a public highway be, and the same is hereby, repealed.

Approved, January 20, 1870.

Apr. 13, 1870.
Vol. 16, p. 83.

CHAP. 54.—An Act Declaring the consent of Congress to the erection of a crib in Lake Erie by the city of Cleveland, Ohio, for the protection of an inlet for a water-works tunnel about to be constructed by said city.

Consent of Congress given to Cleveland to erect a crib in Lake Erie, to protect, etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby given to the City of Cleveland, in the county of Cuyahoga and State of Ohio, to erect and maintain in Lake Erie, at such distance from the shore thereof as may be necessary, a crib for the pro-

tection of an inlet shaft for an underlake water-works tunnel about to be constructed for the purpose of supplying said city with pure water: *Provided*, That said crib shall be furnished with a beacon-light, which beacon-light shall be kept lighted at all such seasons and hours as the light on the pier at the entrance of Cuyahoga river.

Beacon light
on crib.

Approved, April 13, 1870.

CHAP. 57.—An Act To authorize the city of Buffalo, New York, to construct a tunnel under Niagara River, and to erect and maintain an inlet pier therefrom.

Apr. 20, 1870.
Vol. 16, p. 90.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall and may be lawful for the city of Buffalo, in the State of New York, to construct and maintain a tunnel under Black Rock harbor and Niagara river, extending not more than four hundred feet outside of Bird Island pier, and to erect and maintain an inlet pier therefrom, said inlet pier to be located not more than four hundred feet outside of said Bird Island pier.

Buffalo may
construct, etc.,
tunnel under
Black Rock Har-
bor and Niagara
River, etc.
1872, c. 186.

Approved, April 20, 1870.

[No. 48.] A Resolution To provide for survey and estimates of cost of removing obstructions from the Bayou Teche, in the State of Louisiana.

May 5, 1870.
Vol. 16, p. 375.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, instructed to cause a survey and estimates of cost of removing obstructions from and improving the navigation of the Bayou Teche, in the State of Louisiana: *Provided*, That the expense of said survey and estimate shall not exceed the sum of five hundred dollars. And the same is hereby appropriated out of any money in the treasury not otherwise appropriated.

Survey and es-
timates to be
made for remov-
ing obstructions
from Bayou
Teche.

Proviso.

Appropriation

Approved, May 5, 1870.

CHAP. 92.—An Act In relation to the Iowa River in the State of Iowa.

May 6, 1870.
Vol. 16, p. 121.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the Iowa river, in the State of Iowa, as lies north of the town of Wapello, be, and the same is hereby, declared not a navigable river or public highway.

Portion of Iowa
River in Iowa de-
clared not navi-
gable.

Approved, May 6, 1870.

July 7, 1870.
Vol. 16, p. 189.

CHAP. 210.—An Act For the improvement of water communication between the Mississippi River and Lake Michigan, by the Wisconsin and Fox rivers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War is hereby authorized to adopt for the improvement of the navigation of the Wisconsin river such plan as may be recommended by the chief of the Bureau of Engineers.

Secretary of War may adopt plan for improvement of navigation of Wisconsin River.

1872, c. 416.

To ascertain within, etc., amount which should equitably be paid to Green Bay and Mississippi Canal Co. for transfer of property.

1872, c. 416.

SEC. 2. *And be it further enacted, That the Secretary aforesaid is hereby authorized to ascertain at any time he shall deem proper within three years from the passage of this act, the sum which ought in justice to be paid to the Green Bay and Mississippi Canal Company, a corporation existing under the laws of Wisconsin, as an equivalent for the transfer of all and singular its property and rights of property in and to the line of water communication between the Wisconsin river aforesaid and the mouth of the Fox river, including its locks, dams, canals, and franchises, or so much of the same as shall, in the judgment of said Secretary, be needed; and to that end is authorized to join with said company in appointing a board of disinterested and impartial arbitrators, one of whom shall be selected by the Secretary aforesaid, another by said company, and the third by the two arbitrators so selected. The Secretary aforesaid is authorized to employ a competent agent or attorney to represent the interest of the United States upon the hearing before such board: Provided, That in making their award the said arbitrators shall take into consideration the amount of money realized from the sale of lands heretofore granted by Congress to the State of Wisconsin to aid in the construction of said water communication, which amount shall be deducted from the actual value thereof as found by said arbitrators.*

Arbitrators.

Attorney for United State.

Proviso.

Amount deducted from award.

No expenditure to be made for improvement of Fox and Wisconsin rivers until, etc.

Report of arbitrators submitted to Congress.

Proviso.

Tolls and revenues paid into United States Treasury.

SEC. 3. *And be it further enacted, That no money shall be expended on the improvement of the Fox or Wisconsin river until the Green Bay and Mississippi Canal Company shall make and file with the Secretary of War an agreement in writing, whereby it shall agree to grant and convey to the United States the property and franchises mentioned in the foregoing section, upon the terms awarded by the arbitrators. It is hereby made the duty of the Secretary of War to transmit to Congress a copy of the report of the arbitrators, upon which Congress may, at its then present session, elect to take such property upon making an appropriation to pay the amount awarded: Provided, That if the Secretary of War shall not transmit to Congress a copy of the report of the arbitrators at least sixty days before the close of its session, Congress may at its next session make such election and appropriation.*

SEC. 4. *And be it further enacted, That all tolls and revenues derived from the improvements made or acquired under the provisions of this act, after providing for the*

current expenses of operating and keeping the same in repair, shall be paid into the treasury of the United States, and whenever the United States shall be reimbursed for all sums advanced for the same, with interest thereon, then the tolls aforesaid shall be reduced to the least sum which, together with other revenues properly applicable thereto, if any, shall be sufficient to operate and keep the improvements in repair. Reduced when, etc.

SEC. 5. *And be it further enacted*, That the Secretary of War shall annually report to Congress the progress made in the completion of said improvements, the amount expended thereon, the amount, if any, required for the succeeding fiscal year, and the amount of revenue derived therefrom. Secretary of War to report to Congress annually progress in improvements, etc.

Approved, July 7, 1870.

CHAP. 240.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes, for the fiscal year ending June thirtieth, eighteen hundred and seventy-one.

July 11, 1870.

Vol. 16, p. 223.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction and superintendence of the Secretary of War, according to such plans as shall be by him first selected and approved, for the repair, preservation, and completion of the following public works heretofore commenced under the authority of law, and for other purposes hereinafter named, that is to say:—

Appropriations for public works on rivers and harbors.
1871, c. 118, § 4.

For improvement of Superior City harbor, Wisconsin, forty thousand dollars.

Superior.

For improvement of Ontonagon harbor, Lake Superior, Michigan, ten thousand dollars.

Ontonagon.

For improvement of Marquette harbor, Lake Superior, Michigan, twenty-five thousand dollars.

Marquette.

For improvement of Green Bay harbor, Wisconsin, seventeen thousand five hundred dollars.

Green Bay.

For improvement of Manitowoc harbor, Wisconsin, twenty thousand dollars.

Manitowoc.

For improvement of Sheboygan harbor, Wisconsin, fifteen thousand dollars.

Sheboygan.

For improvement of Milwaukee harbor, Wisconsin, forty thousand dollars.

Milwaukee.

For improvement of Racine harbor, Wisconsin, ten thousand dollars.

Racine.

For improvement of Kenosha harbor, Wisconsin, ten thousand dollars.

Kenosha.

For improvement of Michigan City harbor, Indiana, twenty-five thousand dollars.

Michigan City.

New Buffalo.	For improvement of New Buffalo harbor, Michigan, five thousand dollars.
Port Washington.	For improvement of Port Washington harbor, Wisconsin, fifteen thousand dollars.
Aux Bees Scies (Frankfort).	For improvement of Aux Bees Scies harbor, Michigan, ten thousand dollars.
Manistee.	For improvement of Manistee harbor, Michigan, twenty thousand dollars.
Pere Marquette (Ludington).	For improvement of Pere Marquette harbor, Michigan, ten thousand dollars.
Pentwater.	For improvement of Pentwater harbor, Michigan, ten thousand dollars.
White River (Lake).	For improvement of White River harbor, Michigan, twenty thousand dollars.
Muskegon.	For improvement of Muskegon harbor, Michigan, ten thousand dollars.
Grand Haven.	For improvement of Grand Haven harbor, Michigan, ten thousand dollars.
Black Lake (Holland).	For improvement of Black Lake harbor, Michigan, ten thousand dollars.
Saugatuck.	For improvement of Saugatuck harbor, Michigan, ten thousand dollars.
South Haven.	For improvement of South Haven harbor, Michigan, ten thousand dollars.
St. Joseph.	For improvement of Saint Joseph harbor, Michigan, fifteen thousand dollars.
St. Marys.	For improvement of Saint Mary's Falls Canal and Saint Mary's river, Michigan, one hundred and fifty thousand dollars.
Au Sable River.	For improvement of Au Sable river, Michigan, fifteen thousand dollars.
Saginaw.	For improvement of Saginaw river, Michigan, one thousand five hundred dollars.
St. Clair flats.	For improvement of Saint Clair flats, Michigan, sixteen thousand five hundred dollars.
Clinton River.	For improvement of Clinton river, Michigan, five thousand dollars.
Toledo.	For improvement of Toledo harbor, Maumee bay, Ohio, fifty thousand dollars.
Sandusky.	For improvement of Sandusky City harbor, Ohio, ten thousand dollars.
Cleveland.	For improvement of Cleveland harbor, Ohio, twenty thousand dollars.
Conneaut.	For improvement of Conneaut harbor, Ohio, six thousand dollars.
Erie.	For improvement of Erie harbor, Pennsylvania, twenty thousand dollars.
Schuylkill River.	For clearing and buoying the channel of the Schuylkill river at its mouth, at Gibson's point, and above to the Chestnut Street bridge, Philadelphia, Pennsylvania, fifteen thousand dollars.
Dunkirk.	For improvement of Dunkirk harbor, New York, twenty-five thousand dollars.

For improvement of Buffalo harbor, New York, eighty thousand dollars.	Buffalo.
For improvement of Olcott harbor, New York, ten thousand dollars.	Olcott.
For improvement of Charlotte harbor, New York, twelve thousand dollars.	Charlotte.
For improvement of Oak Orchard harbor, New York, eight thousand dollars.	Oak Orchard.
For improvement of Big Sodus harbor, New York, five thousand dollars.	Great Sodus.
For improvement of Little Sodus harbor, New York, five thousand dollars.	Little Sodus.
For improvement of Pultneyville harbor, New York, five thousand dollars.	Pultneyville.
For enlargement, according to the plan of the engineer department, of harbor facilities at Oswego, New York, fifty thousand dollars.	Oswego.
For improvement of Ogdensburg harbor, New York, fifteen thousand dollars.	Ogdensburg.
For improvement of Plattsburg harbor, New York, ten thousand dollars.	Plattsburg..
For improvement of Burlington harbor, Vermont, twenty-five thousand dollars.	Burlington.
For improvement of the Upper Mississippi river, and removing snags and dredging, thirty-six thousand dollars.	Upper Missis- sippi.
For improvement of the Wisconsin river, one hundred thousand dollars.	Wisconsin.
For improvement of the Minnesota river, ten thousand dollars.	Minnesota.
For the preservation of the Falls of Saint Anthony and the navigation of the Mississippi river above the same, fifty thousand dollars.	Falls of St. An- thony, etc.
For improvement of the Des Moines rapids, four hundred thousand dollars.	Des Moines Rapids.
For improvement of the Rock Island rapids, one hundred and fifty thousand dollars.	Rock Island Rapids.
For improvement of the Illinois river, one hundred thousand dollars.	Illinois River.
For improvement of the mouth of the Mississippi river, three hundred thousand dollars.	Mouth of Mis- sissippi.
For improvement of the mouth of the Saint John's river, Florida, fifteen thousand dollars.	St. Johns..
For removing obstructions in Town creek, near Charleston, South Carolina, seven thousand five hundred dollars.	Town Creek. 1872, c. 416.
For improvement of the Falls of the Ohio river and Louisville canal, two hundred and fifty thousand dollars.	Falls of Ohio, etc.
For improvement of the Mississippi, Missouri, and Arkansas rivers, one hundred and fifty thousand dollars.	Mississippi, etc., rivers.
For improvement of the Ohio river, fifty thousand dollars.	Ohio River.
For improvement of the Hudson river, New York, forty thousand dollars.	Hudson River.
For removing obstructions in East river, New York, including Hell Gate, two hundred and fifty thousand dollars.	East River.

New Haven.	For improvement of New Haven harbor, Connecticut, fifteen thousand dollars.
Connecticut River.	For improvement of Connecticut river, forty thousand dollars.
Providence River.	For improvement of Providence river, Rhode Island, five thousand dollars.
Pawtucket River.	For improvement of Pawtucket river, Rhode Island, eight thousand dollars.
Block Island.	For construction of breakwater at Block Island, Rhode Island, thirty thousand dollars.
Boston.	For preservation and improvement of Boston harbor, Massachusetts, one hundred thousand dollars.
Hyannis.	For improvement of Hyannis harbor, Massachusetts, twelve thousand dollars.
Plymouth.	For improvement of Plymouth harbor, Massachusetts, ten thousand dollars.
Taunton River.	For improvement of Taunton river, Massachusetts, ten thousand dollars.
Merrimac River.	For improvement of Merrimac river, Massachusetts, twenty-five thousand dollars.
Kennebunk River.	For improvement of Kennebunk river, Maine, five thousand dollars.
Saco River.	For improvement of Saco river, Maine, ten thousand dollars.
Portland.	For improvement of Portland harbor Maine, ten thousand dollars.
Kennebec River.	For improvement of Kennebec river, Maine, fifteen thousand dollars.
Gut, opposite Bath.	For improvement of navigation at the "Gut" ^[a] , opposite Bath, Maine, ten thousand dollars.
Union River.	For improvement of Union river, Maine, fifteen thousand dollars.
Penobscot River.	For improvement of the Penobscot river, at Bangor and below, Maine, fifteen thousand dollars.
Willamette River.	For improvement of the Willamette river at Portland and to mouth of river, Oregon, thirty-one thousand dollars.
Tennessee River.	For improvement of the Tennessee river, eighty thousand dollars, to be expended below Chattanooga.
Wilmington.	For improvement of Wilmington harbor, Delaware, fifteen thousand dollars.
Westport.	For improvement of Westport harbor, Connecticut, two thousand five hundred dollars.
Cape Fear River.	For improvement of the channel of the mouth of the Cape Fear river, in North Carolina, one hundred thousand dollars.
Galveston.	For improvement of Galveston harbor, Texas, twenty-five thousand dollars.
Chicago.	For enlargement of harbor facilities at Chicago, Illinois, according to the plans of the engineer department, one hundred thousand dollars, and for a harbor of refuge, fifty thousand dollars.

^a The Gut is a part of the Sasanoa (or Back) River.

For improvement of harbor and bay of Mobile, Alabama, Mobile.
fifty thousand dollars.

For the improvement of the Potomac river between the Potomac Riv-
er.
Long bridge, in Washington, and the city of Georgetown,
in the District of Columbia, fifty thousand dollars.

For the improvement of James river, in Virginia, and James River.
the removal of bars and obstructions from Richmond to
and including Harrison's bar, below the junction of the
James and Appomattox rivers, fifty thousand dollars.

For improvement of Bayou Teche, Louisiana, seventeen Bayou Teche.
thousand five hundred dollars.

For examination and surveys for improvements on the Examination
or surveys for
improvements.
north and northwestern lakes and rivers, and the Atlantic
and Pacific coasts, and for contingencies of rivers and har-
bors not provided for in this act, one hundred and fifty
thousand dollars.

SEC. 2. *And be it further enacted*, That the Secretary of Examinations
or surveys to be
made at various
places.
War is hereby directed to cause examinations or surveys,
or both, to be made at the following points, namely:

At Charleston, South Carolina;

At Cyprus bayou, Texas;

At the Housatonic river, below Derby, Connecticut;

At Bridgeport harbor, Connecticut;

At Southport harbor, Connecticut;

At Fifteen-Mile falls [Connecticut River], New Hamp-
shire;

At Pawcatuck river, Rhode Island and Connecticut;

At Narragansett pier, Rhode Island;

Cocheco river, at Dover, New Hampshire;

At Royals river, Maine;

At Narragangus [Narraguagus] river, Maine;

Sullivan river, Maine;

At Sullivan's falls, between the towns of Hancock and
Sullivan;

At South river, New Jersey;

At mouth of Salem river, New Jersey;

At James river, Virginia, between Richmond and City
point, including Harrison's bar below the point;

Appomattox river, Virginia, from Petersburg to its
mouth.

James river and Kanawha canal, Virginia;

At Rappahannock river, below Fredericksburg, Virginia;

At Roanoke river, North Carolina;

At Coosa river, Alabama;

At Mobile harbor, Alabama;

At Cumberland river, from its mouth to the head of
navigation;

At Tombigbee river, in Alabama and Mississippi from
its mouth to the head of navigation;

At Saint Louis and Alton harbors, Mississippi river, be-
tween Alton and mouth of Merrimac [Maramec] river;

At Osage, river, Missouri;

At Ouachita, Little Missouri, and Petit Jane rivers, Ar-
kansas;

At Bayou Saint John, from the mouth of Bayou Saint John, Louisiana, through Lake Ponchartrain and the Rigolet to Ship Island;

At Indianola harbor, Texas;

At Corpus Christi, Texas;

At Buffalo bayou, for a channel of navigation through Buffalo bayou and Galveston bay, to Bolivar channel, near the outer bar in the Gulf of Mexico;

At Sheboygan river, Michigan;

At Harbor of Refuge, on Lake Huron, between Saint Clair river and Point au Barques [^a], Michigan;

At Port Clinton, Ohio;

For survey or examination of the bars and other obstructions to navigation of the Cache, St. Francis Little Red, White, and Black rivers, Arkansas;

For survey or examination of the bar of the Sacramento river, California, known as the Hog's Back, for the purpose of removing the same;

At the mouth of Oconto river, Wisconsin;

At the mouth of the Ahuepee [Ahnapee] river, Wisconsin;

At Chester harbor, on the Delaware river, Pennsylvania;

At Alpeena harbor, Michigan;

At the mouth of the Cape Fear river, North Carolina;

For ship-canal route from Hennepin, on the Illinois river, to Rock Island, on the Mississippi river, via Geneseo, by the most direct and feasible route [^b];

At Peconic river below Riverhead, New York;

At the entrance to Port Jefferson harbor, on the south side of Long Island sound;

At Rocky river, Ohio;

At Salmon river [^c], Lake Ontario, New York;

At the mouth of Two rivers [^d], Wisconsin;

At the mouth of Trinity river, Texas;

At Delaware river, between the city of Trenton and Bordentown;

At Shrewsbury river, New Jersey;

At the mouth of Sabine river, Texas;

At French Broad river, Tennessee;

At Pine river, Saginaw bay, Michigan;

At Brazos, San Jago [Santiago], Texas;

At the mouth of Muskingum river, Ohio;

At Gloucester harbor, Massachusetts;

^a Reports respecting this item discussed the relative advantages of various sites, among which were Port Hope, Blue Ledge, and Sand-beach (Harbor Beach).

^b This item has reference to what is now known as the Illinois and Mississippi Canal.

^c Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

^d This locality, situated at mouth of Twin Rivers, is known as Two Rivers Harbor.

At the harbor of Cambridge and harbor of Queenstown, Maryland;

At the mouth of the Apalachicola river, Florida;

At Nag's head, in North Carolina, with a view of reopening the old inlet near that place;

Survey of the Wabash river, from its mouth to the town of Wabash, Indiana;

For the survey of the Willamette river, above Oregon City, Oregon;

For the survey of the Umpqua river, Oregon;

SEC. 3. *And be it further enacted*, That the sum of forty-two thousand [and] nine hundred dollars be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, to the widening and deepening the ship canal in the Patapsco river and Chesapeake bay, leading toward the harbor of Baltimore.

Ship canal in Patapsco River and Chesapeake Bay.

SEC. 4. *And be it further enacted*, That the sum of twelve thousand dollars, of any unappropriated money in the treasury, be paid and applied, under the direction of the Secretary of War, to deepen the harbor or waters at the mouth of the Susquehanna river.

Mouth of Susquehanna River.

SEC. 5. *And be it further enacted*, That the Secretary of War is hereby authorized and required to detail three engineers, whose duty it shall be to examine all bridges now erected, or in process of erection, across the Ohio river, and to report whether, in their opinion, such bridges, or any of them, as now constructed, or proposed to be constructed, do or will interfere with the free and safe navigation of said river; and if they do or will so interfere, to report also what extent of span and elevation above water will be required to prevent obstruction to navigation, and their estimate of the cost required to change such bridges now built, or being built, to such width of span and elevation above the water as will prevent obstruction to navigation, such report to be made and communicated to the next session of Congress.

Engineers to examine all bridges across Ohio River, and report if navigation is obstructed thereby, etc.

Approved, July 11, 1870.

CHAP. 292.—An Act Making appropriations for sundry civil expenses of the Government for the year ending June thirty, eighteen hundred and seventy-one, and for other purposes.

July 15, 1870.
Vol. 16, p. 291.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending the thirtieth June, eighteen hundred and seventy-one, viz.:—

* * * * *

For repairing the stone piers belonging to the United States in the harbor of New Castle, Delaware, two thousand five hundred dollars.

Newcastle, Del.

Bulkhead rock. For the improvement of Bulkhead rock in Providence river, Rhode Island, two thousand five hundred dollars.

* * * * *

Western, etc., rivers. For examinations and surveys on western and northwestern rivers, fifty thousand dollars.

* * * * *

Appropriation for stone, etc., pier in Delaware Bay. **SEC. 12.** *And be it further enacted,* That two hundred and twenty-five thousand dollars, or so much thereof as may be necessary, be, and the same is hereby, appropriated to construct a good and substantial pier of stone or iron in the Delaware bay, at or near Lewes, in Sussex county, in the State of Delaware, out of any money in the treasury not otherwise appropriated, and to be expended under the direction of the Secretary of War.

Junction and Breakwater Railroad may run over pier, etc. **SEC. 13.** *And be it further enacted,* That it may and shall be lawful for the president, directors, and company of the Junction and Breakwater railroad, in the State of Delaware, to extend their railroad upon and over said pier, and freely to use said pier in connection with their said road, subject to such regulations and charges for maintenance and repairs as the Secretary of War may adopt.

* * * * *

Approved, July 15, 1870.

Jan. 18, 1871.
Vol. 16, p. 399.

CHAP. 21.—An Act Making an additional appropriation for the improvement of the Louisville and Portland Canal for the fiscal year ending June thirty, eighteen hundred and seventy-one, and for other purposes.

Appropriation for Louisville and Portland Canal.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the additional sum of two hundred thousand dollars be, and the same is hereby, appropriated out of any money in the treasury not otherwise appropriated, for the improvement of the Louisville and Portland Canal during the current fiscal year, to be expended in accordance with existing laws; and for the completion of the section work at the Des Moines rapids, three hundred and forty-one thousand dollars.

For work at the Des Moines Rapids, Mississippi River.

Approved, January 18, 1871.

Feb. 2, 1871.
Vol. 16, p. 402.

CHAP. 34.—An Act Making a temporary appropriation for the prosecution of the work upon the improvement of Saint Mary's Falls Canal and Saint Mary's River, Michigan.

Appropriation for improvement of St. Marys Falls Canal and St. Marys River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction and superintendence of the

of the Secretary of War, for the purpose of continuing the prosecution of the work upon the improvement of Saint Mary's Falls canal and Saint Mary's river, the sum of one hundred thousand dollars.

Approved, February 2, 1871.

[No. 40.] A Resolution Authorizing water gauges to be established and observations to be made upon the Mississippi River and its principal tributaries, with a view to obtaining information required for the protection of the alluvial lands against overflow, and for the improvement of navigation.

Feb. 21, 1871.
Vol. 16, p. 598.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed to have water gauges established, and daily observations made of the rise and fall of the Lower Mississippi river and its chief tributaries, at or in the vicinity of Saint Louis, Cairo, Memphis, Helena, Napoleon, Providence, Vicksburg, Red River Landing, Baton Rouge, and Carrollton, on the Mississippi, between the mouth of the Missouri and the Gulf of Mexico, and at or in the vicinity of Fort Leavenworth, on the Missouri;

Water gauges to be established and observations made of rise and fall of lower Mississippi, etc., at certain designated places.
Vol. 25, pp. 421, 424.
Post, pp. 512, 516.

Rock Island, on the Upper Mississippi;

Louisville, on the Ohio;

Florence, on the Tennessee;

Jacksonport, on the White River;

Little Rock, on the Arkansas;

And Alexandria, on the Red River;

and such other places as the Secretary of War may deem advisable; the expenditure for the same to be made from the appropriation for the improvement of rivers and harbors: *Provided*, That the annual cost of the observations shall not exceed the sum of five thousand dollars per annum.

Expenditure not to exceed \$5,000 a year.

Approved, February 21, 1871.

[No. 47.] Joint Resolution Extending the time for the completion of the Portage Lake and Lake Superior Ship Canal.

Mar. 2, 1871.
Vol. 16, p. 599.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the time for the completion of the Portage Lake and Lake Superior ship canal be, and the same is hereby, extended to the third day of March, A. D. eighteen hundred and seventy-two.

Time for completion of Portage Lake and Lake Superior Ship Canal extended.
1865, c. 102; 1866, c. 161; 1869, res. No. 16; 1872, c. 66; 1873, c. 323.

Approved, March 2, 1871.

Mar. 3, 1871.
Vol. 16, p. 495.

CHAP. 114.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirty, eighteen hundred and seventy-two, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Miscellaneous. *Miscellaneous.*— * * *

* * * * *

Payment to
John B. Brown
for work on Lou-
isville and Port-
land Canal.

And Godfrey Weitzel, of the corps of engineers, United States army, and in charge of the improvement of the Louisville canal, is hereby empowered and directed, subject to the approval of the chief of said corps of engineers, to adjust and pay, out of any money appropriated for the improvement of said canal, to John B. Brown, any legal or equitable claim he may have against the United States arising out of his contract by him to perform work on said improvement of said canal, in eighteen hundred and seventy: *Provided*, That there shall not be paid to him in any event over eight thousand two hundred dollars, nor more under that sum than, together with any sums already paid him on account of said contract and work, shall be equal to the fair and reasonable value to the government of the work done by him for the government under such contract.

Limit to
amount.

* * * * *

Approved, March 3, 1871.

Mar. 3, 1871.
Vol. 16, p. 538.

CHAP. 118.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

Appropriations
for repair, etc., of
public works on
rivers and har-
bors.

the following sums of money be, and are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the repair, preservation, and completion of the following public works hereinafter named:

Superior. For improvement of Superior City harbor, Wisconsin, sixty thousand dollars.

Marquette. For improvement of Marquette harbor, Lake Superior, Michigan, sixty thousand dollars.

Green Bay. For improvement of Green Bay harbor, Wisconsin, seventeen thousand five hundred dollars.

Manitowoc. For improvement of Manitowoc harbor, Wisconsin, eleven thousand dollars.

Sheboygan. For improvement of Sheboygan harbor, Wisconsin, fifteen thousand dollars.

Port Washing-
ton. For improvement of Port Washington harbor, Wisconsin, fifteen thousand dollars.

Milwaukee. For improvement of Milwaukee harbor, Wisconsin, thirty-eight thousand dollars.

For improvement of Racine harbor, Wisconsin, ten thousand dollars.	Racine.
For improvement of Kenosha harbor, Wisconsin, ten thousand dollars.	Kenosha.
For improvement of Two-Rivers harbor, Wisconsin, twenty-five thousand dollars.	Two Rivers.
For improvement of Ahnapee harbor, Wisconsin, twenty-five thousand dollars.	Ahnapee.
For improvement of harbor at mouth of Menomonee river, Wisconsin and Michigan, twenty-five thousand dollars.	Mouth of Menomonee River.
For improvement of the north and south branches of the Shrewsbury river, New Jersey, fourteen thousand dollars.	Shrewsbury River.
For improvement of Aux Becs Scies harbor, Michigan, ten thousand dollars.	Aux Becs Scies (Frankfort).
For the improvement of South river, New Jersey, fifteen thousand dollars.	South River.
For the removal of obstructions of Salem river, New Jersey, four thousand dollars.	Salem River.
For improvement of Manistee harbor, Michigan, nine thousand dollars.	Manistee Harbor.
For improvement of Ouachita river from the Louisiana State line to the town of Arkadelphia, in the State of Arkansas, on said river, twenty-five thousand dollars.	Ouachita River.
For improvement of Pere Marquette harbor, Michigan, ten thousand dollars.	Pere Marquette (Ludington).
For improvement of Pentwater harbor, Michigan, ten thousand dollars.	Pentwater.
For improvement of White River harbor, Michigan, twenty thousand dollars.	White River (Lake).
For improvement of Muskegon harbor, Michigan, fifteen thousand dollars.	Muskegon.
For improvement of Grand Haven harbor, Michigan, six thousand dollars.	Grand Haven.
For improvement of Black Lake harbor, Michigan, ten thousand dollars.	Black Lake (Holland).
For improvement of Saugatuck harbor, Michigan, ten thousand dollars.	Saugatuck.
For improvement of Cheboygan harbor, Michigan, ten thousand dollars.	Cheboygan.
For improvement of South Haven harbor, Michigan, fifteen thousand dollars.	South Haven.
For improvement of Saint Joseph harbor, Michigan, ten thousand dollars.	St. Joseph.
For improvement of Saint Mary's Falls canal and Saint Mary's river, Michigan, two hundred and fifty thousand dollars.	St. Marys Falls Canal and St. Marys River.
For improvement of Au Sable river, Michigan, ten thousand dollars.	Au Sable River.
For harbor of refuge, Lake Huron, Michigan, one hundred thousand dollars ^[a] .	Sand beach (Harbor Beach.)

^aThe location is at what was formerly known as Sandbeach. The town that, has since grown up is now called Harbor Beach.

- Clinton River. For improvement of Clinton river, Michigan, one thousand five hundred dollars.
- St. Clair flats. For improvement of Saint Clair flats, Michigan, one thousand five hundred dollars.
- Toledo. For improvement of Toledo harbor, Ohio, fifty thousand dollars.
- Ashtabula. For improvement of Ashtabula harbor, Ohio, fifteen thousand dollars.
- Schuylkill River. For clearing and buoying the channel of the Schuylkill river, at its mouth, at Gibson's point, and above to the Chestnut Street bridge, Philadelphia, Pennsylvania, ten thousand dollars.
- Erie Harbor. For improvement of Erie harbor, Pennsylvania, twenty-nine thousand dollars.
- Chicago. For improvement of Chicago harbor, Illinois, one hundred thousand dollars.
- Calumet. For harbor of refuge, at Calumet, Illinois, fifty thousand dollars.
- Michigan City. For improvement of Michigan City harbor, Indiana, fifteen thousand dollars.
- Dunkirk. For improvement of Dunkirk harbor, New York, twenty-five thousand dollars.
- Port Jefferson. For improvement of Port Jefferson harbor, Long Island, New York, fifteen thousand dollars.
- Buffalo. For improvement of Buffalo harbor, New York, one hundred thousand dollars.
- Olcott. For improvement of Olcott harbor, New York, five thousand dollars.
- Oak Orchard. For improvement of Oak Orchard harbor, New York, ten thousand dollars.
- Charlotte. For improvement of Charlotte harbor, New York, ten thousand dollars.
- Little Sodus. For improvement of Little Sodus harbor, New York, fifteen thousand dollars.
- Pultneyville. For improvement of Pultneyville harbor, New York, five thousand dollars.
- Oswego. For improvement of Oswego harbor, New York, one hundred thousand dollars.
- Ogdensburg. For improvement of Ogdensburg harbor, New York, twenty-five thousand dollars.
- Plattsburg. For improvement of Plattsburg harbor, New York, fifteen thousand dollars.
- Peconic River. For the improvement of Peconic river, below the village of Riverhead, Long Island, five thousand dollars.
- Burlington, Vt. For improvement of Burlington harbor, Vermont, thirty thousand dollars.
- Falls of St. Anthony. For the preservation of the falls of Saint Anthony, and the navigation of the Mississippi river above the same, fifty thousand dollars.
- Ouachita. For improvement of the Ouachita river, in Louisiana, from the Arkansas State line to the mouth of said river, twenty-six thousand dollars.

For improvement of the upper Mississippi river, and removing snags and dredging, forty-two thousand dollars: *Provided*, That no part of such sum shall be paid for the use of any patent or patented machine in which any engineer or officer employed by the government may be interested. Upper Mississippi River. No part for any patented machine.

For improvement of the Minnesota river, ten thousand dollars. Minnesota River.

For improvement of the Rock Island rapids, one hundred and fifty thousand dollars. Rock Island Rapids.

For improvement of the Des Moines rapids, two hundred and fifty thousand dollars. Des Moines Rapids.

For improvement of the Mississippi, Missouri, and Arkansas rivers, one hundred and fifty thousand dollars. Mississippi, Missouri, and Arkansas rivers.

For improvement of the mouth of the Mississippi river, one hundred and twenty-five thousand dollars. Mouth of Mississippi River.

For improvement of the falls of the Ohio river, and Louisville canal, two hundred and fifty thousand dollars. Ohio River and Louisville and Portland Canal.

For improvement of the Ohio river, fifty thousand dollars. Ohio River.

For improvement of Queenstown harbor, Maryland, five thousand dollars. Queenstown Harbor.

For improvement of harbor at Cambridge, Maryland, ten thousand dollars. Cambridge, Md.

For improvement of the ship-channel in the Patapsco river and Chesapeake bay, leading toward the harbor of Baltimore, fifty thousand dollars. Patapsco River and Chesapeake Bay.

For improvement of the channel at the mouth of Cape Fear river, North Carolina, seventy-five thousand dollars. Cape Fear River.

For improvement of Roanoke river, below Weldon, North Carolina, twenty thousand dollars. Roanoke River.

For improvement of the ship-channel in Charleston harbor, South Carolina, thirteen thousand dollars. Charleston Harbor.

For improvement of the James river, below Richmond, Virginia, fifty thousand dollars. James River.

For improvement of the Appomattox river, below Petersburg, Virginia, fifty thousand dollars. Appomattox River.

For improvement of the Rappahannock river, Virginia, fifteen thousand dollars. Rappahannock River.

For improvement of the Hudson river, New York, forty thousand dollars. Hudson River.

For improvement of the East river, New York, including Hell Gate, two hundred and fifty thousand dollars. East River and Hell Gate.

For improvement of Pawtucket River, Rhode Island, seven thousand dollars. Pawtucket River.

For construction of breakwater at Block Island, Rhode Island, seventy-five thousand dollars. Block Island.

For improvement of Pawcatuck river, Rhode Island and Connecticut, ten thousand dollars. Pawcatuck River.

For improvement of Thames river, Connecticut, fifteen thousand dollars. Thames River.

For improvement of Connecticut river, above Hartford and below Holyoke, twenty thousand dollars. Connecticut River.

Connecticut River.	For improvement of Connecticut river, below Hartford, thirty-five thousand dollars.
New Haven.	For improvement of New Haven harbor, Connecticut, forty thousand dollars.
Housatonic River.	For improvement of the Housatonic river, Connecticut, fifteen thousand dollars.
Bridgeport.	For improvement of Bridgeport harbor, Connecticut, twenty thousand dollars.
Taunton River.	For improvement of Taunton river, Massachusetts, ten thousand dollars.
Hyannis.	For improvement of Hyannis harbor, Massachusetts, ten thousand dollars.
Provincetown.	For improvement of Provincetown harbor, Massachusetts, six thousand dollars.
Plymouth.	For improvement of Plymouth harbor, Massachusetts, ten thousand dollars.
Boston.	For improvement of Boston harbor, Massachusetts, one hundred thousand dollars.
Merrimac River.	For improvement of Merrimac river, above Haverhill, Massachusetts, twenty-five thousand dollars.
Kennebunk River.	For improvement of Kennebunk river, Maine, five thousand dollars.
Saco River.	For improvement of Saco river, Maine, fifteen thousand dollars.
Portland.	For improvement of Portland Harbor, Maine, forty thousand dollars.
Cocheco River.	For improvement of the Cocheco river, within the town of Dover, New Hampshire, ten thousand dollars.
Kennebec River.	For improvement of Kennebec river, above Hallowell, Maine, ten thousand dollars.
Kennebec River.	For improvement of Kennebec river, between Gardiner and Richmond, Maine, five thousand dollars.
Gut.	For improvement of navigation at the "Gut" ^a , opposite Bath, Maine, six thousand five hundred dollars.
Penobscot River.	For improvement of the Penobscot river, at Bangor, and below, Maine, fifty thousand dollars.
Other rivers in Maine.	For improvement of Union river, Maine, fifteen thousand dollars.
	For improvement of Royal's river, Maine, ten thousand dollars.
Narragausus River.	For improvement of Narragausus river, Maine, twelve thousand dollars.
Sullivan River.	For improvement of Sullivan river, Maine, ten thousand dollars.
Rivers in Arkansas.	For improvement of White, Black, and Little Red rivers, in the State of Arkansas, ten thousand dollars.
St. Francis River.	For improvement of Saint Francis river, in the State of Arkansas, ten thousand dollars.
Little Missouri River.	For improvement of the Little Missouri river, in the State of Arkansas, ten thousand dollars.
Cumberland River, Tenn.	For improvement of the Cumberland river, below Nashville, Tennessee, thirty thousand dollars.

^a The Gut is a part of Sasanoa (or Back) River.

For improvement of Galveston harbor, Texas, twenty thousand dollars. Galveston.

For construction of breakwater at Wilmington harbor, California, two hundred thousand dollars. Wilmington.

For improvement of the Umpqua river, Oregon, twenty-two thousand five hundred dollars. Umpqua River.

For the improvement of the bar at the mouth of the Saint John's river, Florida, fifteen thousand dollars. St. Johns River, Fla.

For improvement of Mobile harbor, Alabama, fifty thousand dollars. Mobile.

For improvement of the Osage river, Missouri, twenty-five thousand dollars. Osage River.

For improvement of the harbor at Du Luth, Minnesota, sixty thousand dollars. Duluth.

For improvement of the Willamette river, above Oregon city, Oregon, sixteen thousand dollars. Willamette River.

For examination and surveys for improvement on the northern and northwestern lakes and rivers, and the Atlantic and Pacific coasts, and for contingencies of rivers and harbors not provided for in this act, one hundred and seventy-five thousand dollars. Surveys, etc., for improvements on lakes, rivers, and coasts.

SEC. 2. That all moneys heretofore appropriated for the improvement of the Tennessee river, and still unexpended, shall be expended, under the direction of the Secretary of War, for the repair and completion of the works heretofore begun between Knoxville and Chattanooga, and for the continuation of the works now in progress below Chattanooga, including the Muscle shoals. Unexpended appropriations for improvement of Tennessee River, how to be expended.

SEC. 3. That the Secretary of War is hereby directed to cause examinations or surveys, or both, to be made at the following points, namely: Examinations or surveys, or both, to be made at various points.

At Galveston harbor, from the outer bar up to the Red Fish bar, on or nearest to the west shore;

At Mississippi city for harbor on Mississippi sound;

At Black river, Missouri, to Poplar bluff;

At Current river, Missouri, from its mouth to Van Buren;

At Otter creek, Vermont;

At Norfolk harbor, Virginia;

At Eureka harbor, and at Santa Cruz, California;

At Passaic river, between Newark and at Passaic, New Jersey;

For ship canal from the head of Sturgeon bay, Wisconsin, on the line now opened across the portage through the timber to the shore of Lake Michigan, with estimates for constructing the same one hundred feet wide and thirteen feet deep;

At East Chester creek or inlet, New York;

At Port Chester harbor, New York;

At Rondout harbor, Hudson river, New York;

At Maumee river, above Toledo, Ohio;

At Fourche La Faive [Fourche Le Fevre] river, Arkansas;

For resurveying of Monroe harbor, Michigan;

For survey and estimate for removing middle ground at the mouth of Black river, in Saint Clair river, Michigan; Harbor at Stonington, Connecticut;
At Grand Marais, Michigan;
At Neabsco bay, Virginia;
At Accotink bay, Virginia;
At Savannah harbor, Georgia;
At Well's harbor, Maine;
At Coosa river, Alabama;
At Huntington harbor, on south coast of Long Island sound;

And to complete the survey of the Cumberland river, and the resurvey of the Tennessee river, from Brown's ferry to Florence, Alabama;

At Choctawhatchee river, Florida;

At Aquia creek, Virginia;

For survey of White river, from Buffalo shoals to the mouth of James fork, Missouri;

For the survey of the Wabash river, from its mouth to the city of Lafayette;

For survey of the Monongahela river, from New Geneva, in Pennsylvania, to Morgantown, in West Virginia;

For a survey beginning at or near Guntersville, on the Tennessee river, to the headwaters of the Warrior and Coosa rivers, in Alabama, with a view of determining the practicability of uniting the waters of the Tennessee river with the waters of the Warrior or Coosa river for the purposes of navigation, and estimates for necessary locks and dams to extend the navigation on said river to the last-named place;

For examination and survey of the Etowah river, from its mouth up to Cartersville, Georgia, and also for examination and survey of Atchafalaya bay and Calcasieu pass, Louisiana;

Of the Oostenaula river; from Rome, Georgia, up to the mouth of the Coosawattee;

At Chattahoochee river, below Columbus, Georgia;

At the mouth of the Saint John's river, from the outer bar to Jacksonville, Florida;

At the mouth of the Saint Mark's river, from Spanish hole to Saint Mark's, Florida;

At Apalachicola bay, Florida;

At Tampa bay, at Tampa, Florida;

For resurvey of Fifteen-mile falls [Connecticut River];

At Elizabeth and Nansemond rivers, Virginia;

At Camden, Arkansas, to Trinity, Louisiana, on Ouachita river;

At Goldsboro, North Carolina, to the mouth of Neuse river;

At the mouth of Licking river, Kentucky, for harbor of refuge;

For survey of the Cape Fear and Deep rivers, as far up as La Grange, North Carolina;

At Cuivre river, Missouri, from its mouth to Moscow Mills;

At Bayou Bartholomew, from its mouth to the Arkansas State line;

For the examination and survey of the Tangipaha and Chifuncte rivers, in the State of Louisiana;

For the survey of Horse Shoe shoals, in the Delaware river, below Philadelphia, Pennsylvania;

For the survey of the harbor of Norwalk, Connecticut;

For surveying the mouths of Quantico and Choppa Wamasic bays, Virginia;

For examination and survey of Red river, from the mouth to a point above the raft in Louisiana.

SEC. 4. That the unexpended balances of appropriations made by the act approved July eleven, eighteen hundred and seventy, entitled "An act making appropriations for the repair, preservation, and completion of certain public works in [on] rivers and harbors, and for other purposes, for the fiscal year ending June thirty, eighteen hundred and seventy-one," are hereby reappropriated for the purposes therein specified: *Provided*, That any part of the appropriations made by this act may, at the discretion of the Secretary of War, be applied during the current fiscal year.

Unexpended balances of appropriations by act 1870, c. 240, reappropriated.

Provido.

Approved, March 3, 1871.

CHAP. 197.—An Act For the relief of Charles Cooper, Goshom A. Jones, Jerome Rowley, William Hannegan, and John Hannegan.

Mar. 3, 1871.
Vol. 16, p. 700.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Charles Cooper, Goshom A. Jones, Jerome Rowley, William Hannegan, and John Hannegan be, and they are hereby, released and discharged from all liability to the United States under and by reason of their bond executed thereto to secure the faithful performance, by the said William Hannegan and John Hannegan, of their contract with the government of the United States for the improvement of Des Moines rapids, of the Mississippi river, in the State of Iowa, and that the action at law, now pending in the circuit court of the United States for the sixth circuit and northern district of Ohio to enforce said bond, be discontinued by the proper officer of the government, at the costs of the defendants.

Wm. and John Hannegan and their sureties to be released from liability on their bond to secure contract for improvement of Des Moines Rapids.

Approved, March 3, 1871.

CHAP. 14.—An Act Relating to the harbor at Buffalo, New York.

Apr. 15, 1871.
Vol. 17, p. 4.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be authorized, when in his judgment he thinks it will be for the interest of the United States, to extend or continue the contract for the improvement of

Contract for improvement of harbor at Buffalo may be extended by Secretary of War.

the harbor at Buffalo, made and entered into upon the twentieth day of January, eighteen hundred and sixty-eight.

Approved, April 15, 1871.

Apr. 20, 1871.
Vol. 17, p. 5.

CHAP. 21.—An Act Making appropriations to supply deficiencies in the appropriations for the service of the year ending June thirtieth, eighteen hundred and seventy-one, and for additional appropriations for the service of the year ending June thirtieth, eighteen hundred and seventy-two, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Pier at Lewes,
Del.
1870, c. 292, §§
12, 13; 1872, c. 172,
§4; 1873, c. 233, §4.

SEC. 10. That the appropriation for building a pier at Lewes, Delaware, contained in sections twelve and thirteen of the Act approved July fifteenth, eighteen hundred and seventy, entitled "An act making appropriations for sundry civil expenses of the government for the year ending June thirtieth, eighteen hundred and seventy-one, and for other purposes," be, and the same is hereby, continued until June thirtieth, eighteen hundred and seventy-two.

* * * * *

Approved, April 20, 1871.

Mar. 1, 1872.
Vol. 17, p. 32.

CHAP. 23.—An Act Extending the time for the completion of the Green Bay and Sturgeon Bay and Lake Michigan Ship Canal, in the State of Wisconsin.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the time for the completion of the Green Bay and Sturgeon Bay and Lake Michigan ship canal be, and the same is hereby, extended to the tenth day of April, anno Domini eighteen hundred and seventy-four.

Approved, March 1, 1872.

Time for com-
pleting Sturgeon
Bay and Lake
Michigan Ship
Canal extended.
1866, c. 32.

Mar. 5, 1872.
Vol. 17, p. 36.

CHAP. 36.—An Act To provide for the survey of the harbor and river at Washington, D. C.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the chief of engineers of the United States Army, the superintendent of the coast survey, the engineer in charge of public buildings and grounds, the governor of the District of Columbia, Alexander R. Shepherd, and Carlisle P. Patterson, who shall serve without compensation, are hereby created a board of survey, and are empowered and instructed to examine into the condition of the harbors and landings for vessels from the Anacostia bridge, on the eastern branch, along the entire water-front of the city

Board of survey
constituted for
harbor and river
at Washington,
D. C.

1873, c. 233; 1874,
c. 457.

To serve with-
out pay.

of Washington and Georgetown, to the head of tide-water. And the said board are directed to report to Congress, at as early a day as practicable, a full and comprehensive plan for opening, improving, and developing the water-channel so as to secure the best possible harbor facilities along said water-front. And the said board are also directed to take into consideration the sanitary effect upon the city of Washington, and the feasibility of reclaiming, in any improvements suggested, the swamp and marsh lands along said water-front: *Provided*, That any expense attending said report shall not exceed one thousand dollars, and shall be paid by the District of Columbia.

Their duties.

Expenses.

Approved, March 5, 1872.

CHAP. 66.—An Act Extending the time for the completion of the Portage Lake and Lake Superior Ship Canal.

Mar. 27, 1872.
Vol. 17, p. 44.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That time for the completion of the Portage Lake and Lake Superior Ship Canal be, and the same is hereby, extended to the third day of March, anno Domini eighteen hundred and seventy-three.

Time for completion of Portage Lake and Lake Superior Ship Canal extended.
1865, c. 102; 1866, c. 161; 1869, Res. 16; 1871, Res. 47; 1873, c. 323.

Approved, March 27, 1872.

CHAP. 123.—An Act For the relief of R. Nelson Gere.

Apr. 26, 1872.
Vol. 17, p. 658.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized to cancel the contract entered into by R. Nelson Gere, of the city of Syracuse, New York, in the year eighteen hundred and seventy-one, for building a breakwater in the harbor of Oswego, in said State of New York, and to release said Gere therefrom.

Contract with R. Nelson Gere for breakwater at Oswego to be canceled.

Approved, April 26, 1872.

CHAP. 172.—An Act Making appropriations to supply deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirty, ~~seven~~ ^{seventeen} hundred and seventy-two, and for former years, and for other purposes.

May 18, 1872.
Vol. 17, p. 122.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

SEC. 4. That the appropriation for building a pier at Lewes, Delaware, contained in sections twelve and thirteen of the act approved July fifteen, eighteen hundred and seventy, entitled "An act making appropriations for sundry civil expenses of the government for the year ending

Appropriation for pier at Lewes, Del., continued.
1870, c. 292, §§ 12, 13; 1871, c. 21; 1873, c. 233, § 4.

June thirty, eighteen hundred and seventy-one, and for other purposes," be, and the same is hereby, continued until June thirty, eighteen hundred and seventy-three.

* * * * *

Approved, May 18, 1872.

May 21, 1872.
Vol. 17, p. 139.

CHAP. 186.—An Act To authorize the city of Buffalo, New York, to construct a tunnel under Niagara River, and to erect and maintain an inlet-pier therefrom, for the purpose of supplying the city of Buffalo with pure water.

City of Buffalo
may construct
tunnel under Ni-
agara River, etc.
1870, c. 57.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall and may be lawful for the City of Buffalo, in the State of New York, to construct and maintain a tunnel under Black Rock harbor and Niagara river, extending not more than seven hundred feet outside of Bird Island pier, and to erect and maintain an inlet-pier therefrom, said inlet-pier to be located not more than seven hundred feet outside of said Bird Island pier.

Approved, May 21, 1872.

May 27, 1872.
Vol. 17, p. 162.

CHAP. 219.—An Act To authorize the Secretary of War to accept the peninsula in Lake Erie, opposite the harbor of Erie, in the State of Pennsylvania.

Secretary of
War may accept
title to peninsula
in Lake Erie, op-
posite harbor of
Erie, Pa., etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and empowered to receive and accept from the Marine Hospital of Pennsylvania, a corporation duly incorporated by the commonwealth of Pennsylvania, the title to a piece or parcel of land, being the peninsula lying to the northward of and inclosing the bay of Presque Isle, and containing two thousand and twenty-four acres, more or less, to be held by the government of the United States for the protection of the harbor of Erie: *Provided, That* the deed conveying the same shall not be received or accepted until the title to the same is complete and indefeasible, nor unless the acceptance thereof shall be recommended by a board of officers of the corps of engineers appointed by the President.

Approved May 27, 1872.

June 8, 1872.
Vol. 17, p. 679.

CHAP. 372.—An Act For the relief of Samuel Black and Albert R. Cooper.

Payment to
Samuel Black
and Albert R.
Cooper, for work
on Louisville and
Portland Canal.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Godfrey Weitzel, of the corps of engineers, United States army, and in charge of the improvement of the Louisville canal, is hereby empowered and directed, subject to the approval of the chief of said corps of engineers, to adjust

and pay, out of any money appropriated for the improvement of said canal, to Samuel Black and Albert R. Cooper any legal or equitable claim they may have against the United States arising out of their contract to perform work on said improvement of said canal in eighteen hundred and seventy and eighteen hundred and seventy-one: *Provided*, That there shall not be paid to them, in any event, over twenty thousand dollars, nor more under that sum than, together with any sums already paid to them on account of said contract and work, shall be equal to the fair and reasonable value to the government of the work done by them for the government under such contract.

Limit to amount.

Approved, June 8, 1872.

CHAP. 415.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and seventy-three, and for other purposes. June 10, 1872.
Vol. 17, p. 347.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-three, viz.:

* * * *

Miscellaneous objects.— * * *

* * * *

To enable the Secretary of War to pay the expenses incurred, on the part of the United States, in the arbitration had between the United States and the Green Bay and Mississippi Canal Company, thirteen thousand seven hundred and thirteen dollars and ninety-seven cents.

Arbitration between United States and Green Bay, etc., Canal Co., Fox River improvements.

* * * *

Approved, June 10, 1872.

CHAP. 416.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes. June 10, 1872.
Vol. 17, p. 370.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the repair, preservation, and completion of the following public works hereinafter named:

Appropriations for repair, etc., of public works on rivers and harbors.

For the improvement of Du Luth harbor, Minnesota, fifty thousand dollars: *Provided*, That no part of said sum

Duluth.
Proviso.

shall be expended so as to injure the harbor of Superior City, Wisconsin.

Superior. For the improvement of Superior City harbor, Wisconsin, fifty thousand dollars.

Marquette. For the improvement of Marquette harbor, Michigan, fifty thousand dollars.

Menominee. For the improvement of Menominee harbor, Michigan and Wisconsin, twenty-five thousand dollars.

Ahnapee. For the improvement of Ahnapee harbor, Wisconsin, twenty-five thousand dollars.

Two Rivers. For the improvement of Two Rivers harbor, Wisconsin, twenty-five thousand dollars.

Sheboygan. For the improvement of Sheboygan harbor, Wisconsin, eighteen thousand dollars.

Port Washington. For the improvement of Port Washington harbor, Wisconsin, fifteen thousand dollars.

Kenosha. For the improvement of Kenosha harbor, Wisconsin, ten thousand dollars.

Chicago. For the improvement of Chicago harbor, Illinois, ninety thousand dollars.

Calumet. For the improvement of Calumet harbor, Illinois, forty thousand dollars.

Michigan City. For the improvement of Michigan City harbor, Indiana, fifty thousand dollars.

New Buffalo. For the improvement of New Buffalo harbor, Michigan, five thousand dollars.

Green Bay and Mississippi Canal Co. for its property. 1870, c. 210. For payment to the Green Bay and Mississippi Canal Company, for so much of all and singular its property and rights of property in and to the line of water communication between the Wisconsin river and the mouth of the Fox river, including its locks, dams, canals, and franchises, as were under the act of Congress for the improvement of water communication between the Mississippi river and Lake Michigan by the Wisconsin and Fox rivers, approved July seventh, eighteen hundred and seventy, reported by the Secretary of War to be needed, in his communication to the House of Representatives dated March eighth, eighteen hundred and seventy-two, one hundred and forty-five thousand dollars.

Frankfort. For the improvement of Frankfort harbor, Michigan, ten thousand dollars.

Manistee. For the improvement of Manistee harbor, Michigan, ten thousand dollars.

Pere Marquette (Ludington). For the improvement of Pere Marquette harbor, Michigan, ten thousand dollars.

Pentwater. For the improvement of Pentwater harbor, Michigan, thirty thousand dollars.

White River (Lake). For the improvement of White River harbor, Michigan, ten thousand dollars.

Muskegon. For the improvement of Muskegon harbor, Michigan, ten thousand dollars.

Grand Haven. For the improvement of Grand Haven harbor, Michigan, fifteen thousand dollars.

For the improvement of Black Lake harbor, Michigan, ten thousand dollars. Black Lake (Holland).

For the improvement of Saugatuck harbor, Michigan, fifteen thousand dollars. Saugatuck.

For the improvement of South Haven harbor, Michigan, twelve thousand dollars. South Haven.

For the improvement of Saint Joseph harbor, Michigan, three thousand dollars. St. Joseph.

For the improvement of Saint Mary's river and Saint Mary's Falls canal, Michigan, three hundred thousand dollars, of which sum fifteen thousand dollars may be applied to secure the right of way. St. Marys River and St. Marys Falls Canal.

For the improvement of Cheboygan harbor, Michigan, fifteen thousand dollars. Cheboygan.

For the improvement of Au Sable river, Michigan, ten thousand dollars. Au Sable River.

For the improvement of Harbor of Refuge, on Lake Huron, one hundred thousand dollars. Sand beach (Harbor Beach).

For the improvement of the mouth of Black river, in St. Clair river, Michigan, fifteen thousand dollars. Mouth of Black River.

For the improvement of Saint Clair flats, Michigan, four thousand dollars. St. Clair flats.

For the improvement of Toledo harbor, Ohio, fifteen thousand dollars. Toledo.

For the improvement of Sandusky river, Ohio, ten thousand dollars. Sandusky River.

For the improvement of Sandusky City harbor, Ohio, thirteen thousand dollars. Sandusky.

For the improvement of Ashtabula harbor, Ohio, fifteen thousand dollars. Ashtabula.

For the improvement of Vermillion harbor, Ohio, five thousand dollars. Vermilion.

For the improvement of Erie harbor, Pennsylvania, fifteen thousand dollars. Erie.

For the improvement of Dunkirk harbor, New York, twenty-five thousand dollars. Dunkirk.

For the improvement of Port Clinton harbor, Ohio, eight thousand dollars. Port Clinton.

For the improvement of Rocky River harbor, Ohio, ten thousand dollars. Rocky River.

For the improvement of Maumee river above Toledo, Ohio, seven thousand dollars. Maumee River.

For the improvement of Monroe harbor, Michigan, ten thousand dollars. Monroe.

For the improvement of Buffalo harbor, New York, seventy-five thousand dollars; and the unexpended balance heretofore appropriated for building sea-wall at Buffalo. Buffalo.

For the improvement of Olcott harbor, New York, ten thousand dollars. Olcott.

For the improvement of Oak Orchard harbor, New York, two thousand five hundred dollars. Oak Orchard.

For the improvement of Pultneyville harbor, New York, ten thousand dollars. Pultneyville.

- Little Sodus. For the improvement of Little Sodus harbor, New York, fifteen thousand dollars.
- Great Sodus. For the improvement of Big Sodus harbor, New York, fifteen thousand dollars.
- Oswego. For the improvement of Oswego harbor, New York, one hundred thousand dollars.
- Ogdensburg. For the improvement of Ogdensburgh harbor, New York, ten thousand dollars.
- Plattsburg. For the improvement of Plattsburgh harbor, New York, ten thousand dollars.
- Burlington. For the improvement of Burlington harbor, Vermont, thirty thousand dollars.
- Otter Creek. For the improvement of Otter creek, Vermont, from Vergennes to its outlet on Lake Champlain, ten thousand dollars.
- Dredge, etc., boats on upper Mississippi. For dredge and snag boats on the Upper Mississippi river, forty-two thousand dollars.
- Minnesota River. For the improvement of the Minnesota river, Minnesota, ten thousand dollars.
- Des Moines Rapids. For the improvement of the Des Moines rapids, Mississippi river, four hundred thousand dollars.
- Rock Island Rapids. For the improvement of the Rock Island rapids, Mississippi river, fifty thousand dollars.
- Falls of St. Anthony, etc. For the preservation of the Falls of Saint Anthony, Minnesota, and the navigation of the Mississippi river above the same, fifty thousand dollars.
- Mississippi, Missouri, etc., rivers. For improvement of the Mississippi, Missouri, and Arkansas rivers, ninety thousand dollars;
- Little Missouri River. For improvement of the Little Missouri river, ten thousand dollars.
- Ouachita River. For improvement of the Ouachita river, in Arkansas, sixty thousand dollars;
- And further improvement of the Ouachita river, in Louisiana, forty thousand dollars.
- Monongahela River. For the improvement of the Monongahela river between Morgantown and New Geneva, in accordance with the plan submitted by General A. A. Humphreys in his report to the House of Representatives dated February fourteenth, eighteen hundred and seventy-two, twenty-five thousand dollars.
- Ohio River. For the improvement of the Ohio river, and the harbors thereof, including the repair of the Cumberland dam, two hundred thousand dollars.
- Osage River. For the improvement of the Osage river, Missouri, twenty-five thousand dollars.
- Current River. For the improvement of Currant river, Missouri, five thousand dollars.
- Canal at Falls of the Ohio. For the continuing the work on the canal at the Falls of the Ohio, three hundred thousand dollars. And the Secretary of War is hereby directed to report to Congress, at its next session, or sooner, if practicable, the condition of said canal, and the provisions necessary to relieve the same from incumbrance, with a view to such legislation as will render the same free to commerce at the earliest practicable period, subject only to such tolls as may be necessary

for the superintendence and repair thereof, which shall not, after the passage of this act, exceed five cents per ton.

For the improvement of the Mississippi river between the mouth of the Illinois river and the mouth of the Missouri river, twenty-five thousand dollars. Mississippi River.

For the improvement of the Mississippi river between the mouth of the Missouri river, and the mouth of the Merrimac river, one hundred thousand dollars.

For the improvement of the Wabash river, Indiana, commencing at its mouth, fifty thousand dollars. Wabash River.

For the continuation of the work now in progress on the Tennessee river, below Chattanooga, including the Muscle shoals, fifty thousand dollars. Tennessee River.

For the improvement of the Tennessee river, between Knoxville and Chattanooga, twenty-five thousand dollars.

For the improvement of Cumberland river, in Tennessee, twenty thousand dollars. Cumberland River.

For the improvement of the mouth of the Mississippi river, Louisiana, one hundred and fifty-five thousand dollars. Mouth of Mississippi River.

For the improvement of Tones bayou, Louisiana, twenty thousand dollars. Tones Bayou.

For improvement of Calcasieu pass, in the State of Louisiana, fifteen thousand dollars. Calcasieu Pass.

For the improvement of bar in Galveston bay, ten thousand dollars, and for improvement of the harbor of Galveston, Texas, thirty-one thousand dollars. Galveston Bay and Harbor.

For the improvement of Cypress bayou, near Jefferson, Texas, ten thousand dollars. Cypress Bayou.

For the improvement of the Tangipahoa river, Louisiana, two thousand five hundred dollars. Tangipahoa River.

For removing the raft in Red river, Louisiana, one hundred and fifty thousand dollars. Red River raft.

For removing the wreck of the gunboat Oregon, in the Chifuncte river, Louisiana, six thousand dollars. Wreck of gunboat Oregon.

For dredging the bar at the mouth of the harbor of Cedar Keys, Florida, seven thousand five hundred dollars. Dredging at bar at Cedar Keys.

For dredging the bar at the mouth of Saint John's river, Florida, ten thousand dollars. St. Johns River.

For the improvement of Mobile harbor and bay, Alabama, seventy-five thousand dollars. Mobile Harbor and Bay.

For the improvement of the ship-channel in Charleston harbor, South Carolina, thirty-eight thousand seven hundred dollars. Charleston Harbor.

For removing obstructions in Ashepoo river, South Carolina, one thousand three hundred dollars. And the amount of the appropriation made by act of Congress, approved July eleventh, eighteen hundred and seventy, for removing obstructions in Town creek, near Charleston, South Carolina, which remains unexpended, is hereby appropriated to remove wrecks obstructing navigation in Stono river, South Carolina, near Church flats. Ashepoo River.
Town Creek
and Stono River.
1870, c. 240.

For the improvement of Savannah harbor and river, Georgia, fifty thousand dollars. Savannah.

Baltimore.	For the improvement of the entrance to the harbor of Baltimore, in Patapsco river, and Chesapeake bay, one hundred thousand dollars.
Rappahannock River.	For the improvement of the Rappahannock river, below Fredericksburg, Virginia, fifteen thousand dollars.
James River.	For the improvement of the James river, Virginia, fifty thousand dollars.
Appomattox River.	For the improvement of the Appomattox river below Petersburg, Virginia, forty thousand dollars.
Aquia Creek.	For the improvement of Aquia creek, Virginia, one thousand five hundred dollars.
Accotink Creek.	For the improvement of Accotink creek, Virginia, five thousand dollars.
Roanoke River.	For the improvement of the Roanoke river below Weldon, North Carolina, ten thousand dollars.
Cape Fear River.	For the improvement of Cape Fear river, below Wilmington, North Carolina, one hundred thousand dollars.
Queenstown.	For the improvement of Queenstown harbor, Maryland, six thousand dollars.
Worton.	For the improvement of Worton harbor, Maryland, twelve thousand dollars.
Cambridge.	For the improvement of Cambridge harbor, Maryland, ten thousand dollars.
Northeast River.	For the improvement of Northeast river, Maryland, ten thousand dollars.
Wicomico River.	For the improvement of the Wicomico river [^a], Maryland, five thousand dollars.
Schuylkill River.	For clearing and improving the channel of the Schuylkill river from its mouth to the Chestnut-street bridge, Philadelphia, Pennsylvania, forty thousand dollars, of which sum sufficient is to be used for removing the rock between Locust street and the said bridge.
Wilmington.	For the improvement of Wilmington harbor, Delaware, ten thousand dollars.
Newcastle.	For the repair of pier of the ice-harbor at New Castle, Delaware, and for building a new pier at said harbor, twenty-seven thousand dollars.
Delaware River.	For the improvement of Delaware river, between Trenton and Bordentown, New Jersey, ten thousand dollars.
Hudson River.	For the improvement of the Hudson river, New York, forty thousand dollars.
East River.	For the removal of obstructions in the East river, New York, including Hell Gate, two hundred and twenty-five thousand dollars.
Providence River.	For the improvement of Providence river, Rhode Island, ten thousand dollars.
Pawtucket River.	For the improvement of Pawtucket river, Rhode Island, ten thousand dollars.
Passaic River.	For the improvement of the Passaic river, between Newark and Passaic, New Jersey, twenty-five thousand dollars.
Port Chester.	For the improvement and removal of rocks in Port Cles-ter [<i>sic</i>] harbor, New York, twelve thousand dollars.

^a On the eastern shore.

- For the improvement of Roundout harbor, New York, ten thousand dollars. Roundout.
- For the improvement of the breakwater at Block island, Rhode Island, fifty thousand dollars. Block Island.
- For the improvement of Pawcatuck river, Rhode Island and Connecticut, ten thousand dollars. Pawcatuck.
- For the improvement of the Thames River, Connecticut, ten thousand dollars. Thames River.
- For the improvement of the Connecticut river, below Hartford, Connecticut, including Saybrook bar at the mouth of the river, forty thousand dollars. Connecticut River.
- For the improvement of the Connecticut river on or above Enfield falls and below Holyoke, twenty-five thousand dollars.
- For the improvement of New Haven harbor, Connecticut, twenty thousand dollars. New Haven.
- For the improvement of the Housatonic river, Connecticut, fifteen thousand dollars. Housatonic River.
- For the improvement of Bridgeport harbor, Connecticut, forty thousand dollars. Bridgeport.
- For the improvement of Norwalk harbor, Connecticut, between the stone bridge and the railroad drawbridge, ten thousand dollars. Norwalk.
- For the improvement of Port Jefferson harbor, Long Island, New York, fifteen thousand dollars. Port Jefferson.
- For the improvement of Peconic river, Long Island, New York, ten thousand dollars. Peconic River.
- For the improvement of Huntington harbor, Long Island, New York, twenty-two thousand five hundred dollars. Huntington.
- For the improvement of the Narragausus river, Maine, ten thousand dollars. Narragausus River.
- For the improvment of Sullivan river and Sullivan falls, Maine, twenty-five thousand dollars. Sullivan River and Falls.
- For the improvement of the Penobscot river, Maine, forty thousand dollars. Penobscot River.
- For the improvement of the Kennebec river, Maine, eight thousand dollars. Kennebec River.
- For the improvement of Royals river, Maine, ten thousand dollars. Royals River.
- For the improvement of Portland harbor and Back bay, Maine, forty-five thousand dollars. Portland.
- For the improvement of Saco river, Maine, fifteen thousand dollars. Saco River.
- For the improvement of Richmond's Island, Maine, twenty thousand dollars. Richmond Island.
- For removing rock in Gloucester harbor, Massachusetts, ten thousand dollars. Gloucester.
- For the improvement of Boston harbor, Massachusetts, seventy-five thousand dollars. Boston.
- For the improvement of Taunton river, Massachusetts, ten thousand dollars. Taunton River.
- For the improvement of Plymouth harbor, Massachusetts, two thousand five hundred dollars. Plymouth.

Edgartown.	For the improvement of Edgartown harbor, Massachusetts, twenty thousand dollars.
Provincetown.	For the improvement of Provincetown harbor, Massachusetts, five thousand dollars.
Wells.	For the improvement of Wells harbor, Maine, five thousand dollars.
Wellfleet.	For removal of rocks at entrance of Wellfleet harbor, Massachusetts, five thousand dollars.
Merrimac River.	For the improvement of the Merrimac river above Haverhill, Massachusetts, twenty-five thousand dollars.
Duxbury.	For the improvement of Duxbury harbor, Massachusetts, ten thousand dollars.
Wareham.	For the improvement of Wareham harbor, Massachusetts, ten thousand dollars.
Lower Willamette River.	For the improvement of the Lower Willamette river, Oregon, fifty thousand dollars.
Upper Columbia River.	For the improvement of the Upper Columbia river, Oregon, fifty thousand dollars.
San Francisco.	For the removal of Rincon rock, in the harbor of San Francisco, California, fifty thousand dollars.
Wilmington.	For the improvement of the breakwater at Wilmington, California, seventy-five thousand dollars.
Tombigbee River. 1873, c. 233.	For the improvement of the Tombigbee river, ten thousand dollars.
New Haven.	For removal of rocks at New Haven harbor, Connecticut, fifteen thousand dollars.
Cocheco River.	For improvement of Cocheco river within the town of Dover, New Hampshire, ten thousand dollars.
Black River.	For improvement of Black River harbor, Ohio, twenty thousand dollars.
Surveys, etc., for improvement of rivers and harbors.	For surveys and examinations, with a view to the improvement of rivers and harbors, one hundred and fifty thousand dollars.
Examinations or surveys, or both, to be made at various points.	SEC. 2. That the Secretary of War is hereby directed to cause examinations or surveys, or both, to be made at the following points, namely: At Keyport harbor, New Jersey; channel between Staten island and New Jersey; At Cohansey creek, New Jersey; At Bear creek, Lake Ontario, New York; At Waddington harbor, New York; For a breakwater at Rouse's Point, on Lake Champlain, New York; At Port Austin and Port Crescent, Michigan; At the mouth of Pensaukie river, Wisconsin; At Waukegan harbor, Illinois; The Machias river, Maine; At Wickford harbor and Newport harbor, Rhode Island; The east side of Providence river, between Field's point and Fox point, Rhode Island; At Port Orford, Oregon; At Estero bay ^a , San Louis Obispo county, California;

^a Known also as El Moro Harbor.

At the mouths of Nomoni creek and Occoquan river, Virginia;

The bay or sound from Delaware line through Worcester county to Chincoteague inlet, Virginia, with a view to an inlet at or near a place called the Hommacks;

For ship-canal between the waters of Galveston bay and Saline [Sabine] lake, Texas;

Chester river at Kent Island narrows, Maryland;

Saint Francis river, from Greenville down, Missouri;

Gasconade river, Missouri;

Tombigbee river, between Fulton and Columbus, Mississippi;

Harbor of Cedar Keys and channel to same, Florida;

Niantic river, Connecticut;

The bars at the outlet of Sabine pass, Texas;

The Mississippi river between the mouth of the Missouri river and the mouth of the Ohio river;

West end of the pass [Sabine Pass] at and near Blo [Blue] Buck point, Texas;

The bar at the mouth of Sabine river in Sabine lake, and to extend up the main channel of said river to the town of Belzora;

At the mouth of the Nuches [Neches] river, in Sabine lake, and to extend up the main channel of said river to the town of Boonville, at the point where the Angelica [Angelina] river falls into the Nuches [Neches] river, and to extend up the main channel of said river to the town of Pattonia, Texas;

At the mouth of the Trinity river, in Galveston bay, and to extend up the main channel of said river to the town of Magnolia, Texas;

Washington harbor, North Carolina;

Edenton harbor, North Carolina;

Mouth of Mackay's creek, North Carolina;

Chippewa river up to Chippewa falls, Wisconsin;

Harbor at Swanton, Vermont;

Harbor at Galveston, Texas;

At Apalachicola river, from Chattahooche, Florida, to Apalachicola;

At Chattahooche river, from Columbus, Georgia, to Chattahooche, Florida;

At Flint river, from Albany, Georgia, to Chattahooche, Florida;

For survey of breakwater at Milford, Connecticut;

Mouth of Pine river, Michigan;

The harbor of San Diego, California;

Mouth of Grand Calumet river, Indiana;

Great Kanawha river, from the Great falls to the mouth, West Virginia;

To complete the survey of the James river and Kanawha canal;

For survey of Camden harbor, Maine;
 For a sea-wall or breakwater at Trinidad harbor, California;
 Of the channel and bank at entrance of Salem harbor;
 On Merrimack river, Massachusetts, from Haverhill to Newburyport, including Duck Hole and Currier Shoals;
 The New river, from the mouth of Greenbrier, in West Virginia, to the lead mines, in Wythe county, Virginia;
 At St. Helena bar, in the Columbia river, Oregon;
 For survey [*sic*] for the removal of wrecks of gun-boats, steamers, and other obstructions placed in Yazoo river during the war, and for the resurvey of Savannah harbor;
 The Delaware river between Trenton and Easton;
 For the survey of the river St. Mary's, in Ohio and Indiana;
 For the survey of the Minnesota river above the mouth of the Yellow Medicine, Minnesota.

In examinations or surveys Secretary of War to ascertain amount of tonnage of commercial business year previous, etc.

SEC. 3. That in the examinations or surveys of all points mentioned in the foregoing section, the Secretary of War be directed to ascertain, as far as practicable, the amount of tonnage of commercial business during the previous year at each point, together with such other facts as bear upon the question of the contemplated improvement, and that he communicate the same, together with his report of the examination or survey of such point, to Congress: *Provided*, That so much of the amount herewith appropriated for the survey of rivers and harbors as is requisite for contingencies, may be used for said purpose.

Proviso.

Approved, June 10, 1872.

Jan. 8, 1873.
 Vol. 17, p. 406.

CHAP. 19.—An Act To provide for the removal of the sunken wreck which now obstructs the channel-way off Sandy Hook.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of fifteen thousand dollars, or so much thereof as may be necessary, be, and the same hereby is, appropriated, to be expended under the direction of the Secretary of War, out of any money in the treasury not otherwise appropriated, for the purpose of removing the sunken wreck which now obstructs the channel-way off Sandy Hook, New York: *Provided*, That nothing herein contained or any action to be had hereunder shall relieve from liability to repay such expenditure any one responsible for said obstruction.

Appropriation for removal of wreck of schooner Charles H. Moller, sunk eastward of Flynn's Knoll, between Swash and Main Ship channels, Lower New York Bay, off Sandy Hook, N. J.

Proviso.

Approved, January 8, 1873.

CHAP. 54.—An Act Authorizing the Secretary of War to contract for the construction of a light-draught snag-boat to ply on the Mississippi, Missouri, and Arkansas rivers. Jan. 23, 1873.
Vol. 17, p. 418.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and is hereby, authorized to contract for the construction of a light-draught snag-boat to ply on the Mississippi, Missouri, and Arkansas rivers: *Provided, That* said contract shall not require more than twenty-five thousand dollars over and above the amount available for such purpose, to be taken from the next appropriation made for the improvement of said rivers. Construction of light-draft snag boat may be contracted for.
Cost, and from what appropriation.

Approved, January 23, 1873.

CHAP. 69.—An Act For the relief of Margaret Fillebrown. Jan. 24, 1873.
Vol. 17, p. 717.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury is hereby directed to pay Margaret Fillebrown, the widow of the late Henry C. Fillebrown, who lost his life by being drowned in the Coosa river, in the State of Alabama, while engaged in the service of the United States as an engineer, the salary the said Henry C. Fillebrown would have been entitled to have received, from the day of his death, viz.: August eleventh, eighteen hundred and seventy-one, to the end of the fiscal year in which his death occurred, had he remained in said service, being at the rate of two hundred dollars per month. Payment to Margaret Fillebrown.

Approved, January 24, 1873.

CHAP. 233.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes. Mar. 3, 1873.
Vol. 17, p. 560.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the repair, preservation, and completion of the following public works hereinafter named: Appropriations for repair, etc., of public works on rivers and harbors.

For the purpose of dredging out the bay of Superior from the natural entrance to the docks of Superior and Duluth. Superior and Duluth.

For the improvement of Marquette harbor, Michigan, fifteen thousand dollars. Marquette.

For the improvement of Menomonee harbor, Wisconsin, twenty-five thousand dollars. Menomonee.

Green Bay.	For the improvement of Green Bay harbor, Wisconsin, twenty thousand dollars.
Two Rivers.	For the improvement of Two Rivers harbor, Wisconsin, twenty-five thousand dollars.
Manitowoc.	For the improvement of Manitowoc harbor, Wisconsin, twenty thousand dollars.
Sheboygan.	For the improvement of Sheboygan harbor, Wisconsin, ten thousand dollars.
Port Washington.	For the improvement of Port Washington harbor, Wisconsin, fifteen thousand dollars.
Milwaukee.	For the improvement of Milwaukee harbor, Wisconsin, ten thousand dollars.
Racine.	For the improvement of Racine harbor, Wisconsin, twenty thousand dollars.
Chicago.	For the improvement of Chicago harbor, Illinois, ninety thousand dollars.
Calumet.	For the improvement of Calumet harbor, Illinois, forty thousand dollars.
Michigan City.	For the improvement of Michigan City harbor, Indiana, fifty thousand dollars.
Fox and Wisconsin rivers.	For the improvement of the Fox and Wisconsin rivers, three hundred thousand dollars.
Manistee.	For the improvement of Manistee harbor, Michigan, ten thousand dollars.
Ludington.	For the improvement of Ludington harbor, Michigan, twenty-five thousand dollars.
Washington and Georgetown. 1872, c. 38; 1874, c. 457.	For the improvement of the harbors of Washington and Georgetown, District of Columbia, fifty thousand dollars.
Kanawha River.	For the improvement of Great Kanawha river, West Virginia, twenty-five thousand dollars.
White River (Lake).	For the improvement of White river harbor, Michigan, seven thousand dollars.
Frankfort.	For the improvement of Frankfort harbor, Michigan, ten thousand dollars.
Grand Haven.	For the improvement of Grand Haven harbor, Michigan, seventy-five thousand dollars.
Black Lake (Holland).	For the improvement of Black Lake harbor, Michigan, twelve thousand dollars.
Saugatuck.	For the improvement of Saugatuck harbor, Michigan, ten thousand dollars.
South Haven.	For the improvement of South Haven harbor, Michigan, twenty thousand dollars.
Monroe.	For the improvement of Monroe harbor, Michigan, fifteen thousand dollars.
Cheboygan.	For the improvement of Cheboygan harbor, Michigan, fifteen thousand dollars.
St. Marys Falls Canal.	For the improvement of Saint Mary's Falls canal, two hundred thousand dollars.
St. Clair River.	For the improvement of Saint Clair river, at the mouth of Black river, fifteen thousand dollars.
Sand beach (Harbor Beach).	For the improvement of harbor of Refuge, on Lake Huron, seventy-five thousand dollars.
Pentwater.	For the improvement of Pentwater harbor, Michigan, twenty thousand dollars.

- For the improvement of Saint Clair Flats canal, one hundred thousand dollars. St. Clair Flats Canal.
- For the improvement of Toledo harbor, Ohio, one hundred thousand dollars. Toledo.
- For the improvement of Sandusky City harbor, Ohio, twenty-five thousand dollars. Sandusky.
- For the improvement of Vermillion harbor, Ohio, twelve thousand dollars. Vermillion.
- For the improvement of Black River harbor, Ohio, twenty thousand dollars. Black River (Lorain).
- For the improvement of Cleaveland harbor, Ohio, one thousand dollars. Cleveland.
- For the improvement of Ashtabula harbor, Ohio, sixteen thousand dollars. Ashtabula.
- For the improvement of Conneaut harbor, Ohio, four hundred dollars. Conneaut.
- For the improvement of Dunkirk harbor, New York, forty thousand dollars. Dunkirk.
- For the improvement of Buffalo harbor, New York, seventy-five thousand dollars. Buffalo.
- For the improvement of Olcott harbor, New York, ten thousand dollars. Olcott.
- For the improvement of Oak Orchard harbor, New York, ten thousand dollars. Oak Orchard.
- For the improvement of Pultneyville harbor, New York, ten thousand dollars. Pultneyville.
- For the improvement of Little Sodus harbor, New York, fifteen thousand dollars. Little Sodus.
- For the improvement of Oswego harbor, New York, one hundred thousand dollars. Oswego.
- For the improvement of Waddington harbor, New York, ten thousand dollars. Waddington.
- For the improvement of Ogdensburgh harbor, New York, six thousand dollars. Ogdensburg.
- For the improvement of Plattsburgh harbor, New York, ten thousand dollars. Plattsburg.
- For the improvement of Swanton harbor, Vermont, fifteen thousand dollars. Swanton.
- For the removal of a sand-bar in the harbor at the mouth of Black river, New York, five thousand dollars, or so much thereof as may be necessary. Mouth of Black River.
- For the improvement of Peconic river, Long Island, New York, ten thousand dollars. Peconic River.
- For the improvement of Burlington harbor, Vermont, twenty-five thousand dollars. Burlington.
- For the preservation of the falls of Saint Anthony, Minnesota, and the navigation of the Mississippi river above the same, fifty thousand dollars. Falls of St. Anthony and Mississippi River.
- For the improvement of the Minnesota river, Minnesota, ten thousand dollars: *Provided*, That one half of said sum shall be expended between the mouth of the Yellow Medicine and Minnesota falls on said river. Minnesota River. *Provido.*
- For construction of the lock and dam on the Mississippi river, at Meeker's Island, Minnesota, according to the Lock and dam at Meekers Island.

Rights of Min-
nesota to be first
relinquished.
1868, c. 228.

surveys and plans of the War Department, twenty-five thousand dollars: *Provided*, That all rights and claims in and to the land-grant made to the State of Minnesota for the above work, by act approved July twenty-third, eighteen hundred and sixty-eight, shall be fully relinquished to the United States before any of this appropriation is expended.

Upper Missis-
sippi River.

For the improvement of the Upper Mississippi river, twenty-five thousand dollars.

Illinois River.

For the improvement of the Illinois river, one hundred thousand dollars.

Des Moines
Rapids.

For the improvement of the Des Moines rapids, Mississippi river, four hundred thousand dollars.

Rock Island
Rapids.

For the improvement of the Rock Island rapids, Mississippi river, fifty thousand dollars.

Harbor of refuge,
Sturgeon
Bay Canal.

For the improvement of the harbor of Refuge at the entrance of the Sturgeon Bay canal, forty thousand dollars.

Mississippi,
Missouri, and
Arkansas rivers.

For the improvement of the Mississippi, Missouri, and Arkansas rivers, one hundred thousand dollars.

Yazoo River.

For improvement of Yazoo river, forty thousand dollars.

Tombigbee
River.

The ten thousand dollars appropriated at the second session of the Forty-second Congress for the improvement of the Tombigbee river shall be expended in the State of Mississippi.

Osage River.

For the improvement of the Osage river, Missouri, twenty-five thousand dollars.

White and St.
Francis rivers.

For the improvement of the White and Saint Francis rivers, fifty thousand dollars.

Ouachita River.

For the improvement of the Ouachita river, in Louisiana, sixty thousand dollars.

Mississippi
River.

For the improvement of the Mississippi river between the mouth of the Missouri river and the mouth of the Ohio river, two hundred thousand dollars.

Ohio River.
Godfrey Weitz-
zel to adjust and
pay legal, etc.,
claims of J. C.
Dennis.

For the improvement of the Ohio river, two hundred thousand dollars. And that Godfrey Weitzell of the corps of engineers, United States army, in charge of the Louisville and Portland canal, is hereby empowered and directed, subject to the approval of the chief of engineers of said corps, to adjust and pay, out of any money appropriated for the improvement of said canal, to J. C. Dennis any legal or equitable claims he may have against the United States arising out of work done by him under Hugh McGlinchey and Company's contract to perform work on said canal, in the years eighteen hundred and seventy-one and eighteen hundred and seventy-two; and said Godfrey Weitzell is further authorized and directed to pay to said J. C. Dennis, in addition to the amount above provided for, such other sums as said Weitzell shall find that said Dennis is legally or equitably entitled to as assignee of Hugh McGlinchey and Company for work done by said Dennis on said improvement: *Provided*, That such sums shall not exceed the amount due and owing by the government of the United States for work done under said contract of Hugh McGlinchey and Company, and that the

Further sums
as assignee.

Amount not to
exceed what the
United States
owes under con-
tract with Hugh
McGlinchey & Co.

sums thus received of Weitzell shall be in full of the claim of said McGlincy and Company under their contract, and in full of the claim of said Dennis as the assignee of said firm.

For completing the Louisville and Portland canal, one hundred thousand dollars; and the Secretary of the Treasury is authorized and directed to assume, on behalf of the United States, the control and management of the said canal in conformity with the terms of the joint resolution of the legislature of the State of Kentucky, approved March twenty-eight, eighteen hundred and seventy-two, at such time and in such manner as in his judgment the interests of the United States, and the commerce thereof, may require; and the sum of money necessary to enable the Secretary of the Treasury to carry this provision into effect is hereby appropriated: *Provided*, That after the United States shall assume control of said canal, the tolls thereon on vessels propelled by steam shall be reduced to twenty-five cents per ton, and on all other vessels in proportion [^a].

Louisville and Portland Canal; United States to assume control, etc.

Appropriation. 1874, c. 165.

Tolls to be reduced.

For the improvement of the Upper Monongahela river, near Morgantown, West Virginia, sixty-six thousand dollars.

Upper Monongahela River.

For the improvement of the Cumberland river below Nashville, Tennessee, twenty-five thousand dollars.

Cumberland River.

For the improvement of the Wabash river, Indiana and Illinois, fifty thousand dollars.

Wabash River.

For the improvement of the Tennessee river below Chattanooga, including the Muscle shoals, one hundred thousand dollars.

Tennessee River.

For the improvement of the Tennessee river, above Chattanooga, twenty-five thousand dollars.

For the improvement of the mouth of the Mississippi river, one hundred and twenty-five thousand dollars.

Mouth of Mississippi River.

For removing the raft in Red river, Louisiana, eighty thousand dollars.

Removing raft in Red River.

For the improvement of Cypress bayou, and construction of dams, and dredging at the foot of Soda lake, Texas, fifty thousand dollars.

Cypress Bayou and dams.

For the improvement of Mobile harbor and bay, Alabama, one hundred thousand dollars.

Mobile Harbor and Bay.

For completing work now in progress in improving Charleston harbor, South Carolina, five thousand dollars.

Charleston.

For the improvement of Savannah harbor and river, Georgia, fifty thousand dollars.

Savannah Harbor and River.

For the improvement of Saint John's river, Florida, ten thousand dollars.

St. John's River.

For the improvement of the entrance to the harbor of Baltimore, in Patapsco river and Chesapeake bay, two hundred thousand dollars.

Baltimore.

^a The amount expended in carrying into effect the provisions of this paragraph and of those of the act approved May 11, 1874, on the same subject, was \$1,675,354.31, exclusive of the expenditure of the whole of the specific appropriation of \$100,000, provided in the above paragraph for completing the canal.

- Wicomico River. For the improvement of the Wicomico river^[a], Maryland, five thousand dollars.
- Cambridge. For the improvement of Cambridge harbor, Maryland, five thousand dollars.
- Chester River. For the improvement of Chester river at Kent Island narrows, Maryland, fifteen thousand dollars.
- Aquia Creek. For the improvement of Aquia creek, Virginia, two thousand dollars.
- Occoquan River. For the improvement of the mouth of Occoquan river, Virginia, five thousand dollars.
- Nomini Creek. For the improvement of the mouth of Nomoni creek, Virginia, ten thousand dollars.
- Rappahannock River. For the improvement of the Rappahannock river below Fredericksburgh, Virginia, fifteen thousand dollars.
- James River. For the improvement of the James river, Virginia, seventy-five thousand dollars.
- Elizabeth River. For the improvement of the south branch of Elizabeth river, Virginia, fifteen thousand dollars.
- Appomattox River. For the improvement of the Appomattox river below Petersburg, Virginia, thirty thousand dollars.
- Nansemond River. For the improvement of Nansemond river, Virginia, fifteen thousand dollars.
- Roanoke River. For the improvement of Roanoke river, below Weldon, North Carolina, ten thousand dollars.
- Cape Fear River. For the improvement of Cape Fear river below Wilmington, North Carolina, one hundred thousand dollars.
- Wilmington, Del. For the improvement of Wilmington harbor, Delaware, six thousand dollars.
- Delaware River. For the improvement of the channel of the Delaware river, at Fort Mifflin bar, fifty thousand dollars.
- Work not to be commenced until, etc.
1875, c. 134. For the improvement of the channel of the Delaware river at and near the Horse-Shoe shoals, fifty thousand dollars; the work not to be commenced until an examination and survey has been made by a board of engineers of the United States army, appointed by the Secretary of War, and a favorable report upon the feasibility and expense of the plan adopted for the prevention and removal of the obstructions.
- Schuylkill River. For the improvement of the channel of the Schuylkill river, Pennsylvania, forty thousand dollars, of which amount a portion shall be used for commencing the removal of the rocks at and near South street wharf.
- Broadkill River. For the improvement of Broadkill river, Delaware, ten thousand dollars.
- Ice harbor at Newcastle. For building an additional pier for the ice-harbor at New Castle, Delaware, twenty thousand dollars.
- South River. For the improvement of South river, New Jersey, five thousand dollars.
- Shrewsbury River. For the improvement of the North and South branches of Shrewsbury river, New Jersey, five thousand dollars.
- Delaware River. For the improvement of Delaware river between Trenton and Bordentown, New Jersey, fifteen thousand dollars.

^a On the eastern shore.

- For the improvement of Hudson river, New York, forty thousand dollars. Hudson River.
- For removing obstructions in East river, New York, including Hell Gate, two hundred and twenty-five thousand dollars. East River and Hell Gate.
- For the improvement of Passaic river, New Jersey, twenty-five thousand dollars. Passaic River.
- For the improvement of East Chester creek, New York, twenty-five thousand dollars. East Chester Creek.
- For the improvement of Rondout harbor, Hudson river, New York, twenty thousand dollars. Rondout.
- For the improvement of Pawtucket river, Rhode Island, ten thousand dollars. Pawtucket River.
- For the improvement of Providence river, Rhode Island, ten thousand dollars. Providence River.
- For dredging at the entrance of Newport harbor, Rhode Island, and for a jetty on the south end of Goat island, eight thousand five hundred dollars. Newport.
- For the improvement of Cohansey creek, New Jersey, ten thousand dollars. Cohansey Creek.
- For the improvement of harbor at Block island, Rhode Island, fifty thousand dollars. Block island.
- For the improvement of Wickford harbor, Rhode Island, five thousand dollars. Wickford.
- For the improvement of Pawcatuck river, Rhode Island and Connecticut, ten thousand dollars. Pawcatuck River.
- For the improvement of Connecticut river, below Hartford, Connecticut, twenty thousand dollars. Connecticut River.
- For the improvement of Connecticut river above Hartford, and below Enfield falls, twenty thousand dollars.
- For the improvement of New Haven harbor, Connecticut, twenty-five thousand dollars. New Haven.
- For the improvement of Housatonic river, Connecticut, ten thousand dollars. Housatonic River.
- For the improvement of Bridgeport harbor, Connecticut, thirty thousand dollars. Bridgeport.
- For the improvement of Norwalk harbor, Connecticut, ten thousand dollars. Norwalk.
- For the improvement of Stonington harbor, Connecticut, by deepening and dredging the same and its approaches, twenty-five thousand dollars. Stonington.
- For the improvement of Saint Croix river above the "ledge," Maine, ten thousand dollars. St. Croix River.
- For the improvement of Machias river, Maine, twelve thousand dollars. Machias River.
- For the improvement of Camden harbor, Maine, ten thousand dollars. Camden.
- For the improvement of Penobscot river, Maine, twenty thousand dollars. Penobscot River.
- For the improvement of Kennebec river, Maine, twelve thousand dollars. Kennebec River.
- For the improvement of Portland harbor, Maine, fifty thousand dollars. Portland.

Richmond Island.	For the improvement of Richmond island, Maine, sixty thousand dollars.
Cocheco River.	For the improvement of Cocheco river, New Hampshire, ten thousand dollars.
Merrimack River.	For the improvement of Merrimac river, Massachusetts, twenty-five thousand dollars.
Boston Harbor, and Deer and Lovells islands.	For the improvement of Boston harbor, Massachusetts, including Deer and Lovell's islands, one hundred and fifty thousand dollars.
Duxbury.	For the improvement of the South channel at entrance of Duxbury harbor, Massachusetts, ten thousand dollars.
Plymouth.	For the improvement of Plymouth harbor, Massachusetts, three thousand dollars.
Provincetown.	For the improvement of Provincetown harbor, Massachusetts, six thousand dollars.
Hyannis.	For the improvement of Hyannis harbor, Massachusetts, ten thousand dollars.
Wareham.	For the improvement of Wareham harbor, Massachusetts, ten thousand dollars.
Taunton River.	For the improvement of Taunton river, Massachusetts, ten thousand dollars.
Salem.	For removing sand-bar forming at the entrance of Salem harbor, Massachusetts, fifteen thousand dollars.
Lower Willamette and Columbia rivers.	For the improvement of the Lower Willamette and Columbia rivers, from Portland, Oregon, to the sea, twenty thousand dollars.
Upper Willamette River.	For the improvement of the Upper Willamette river, Oregon, three thousand dollars.
Breakwater at Wilmington, Cal.	For the improvement of breakwater at Wilmington, California, one hundred and fifty thousand dollars.
Surveys, examinations, etc.	For surveys and examinations, and contingencies of rivers and harbors, one hundred and twenty-five thousand dollars.

Examinations or surveys, or both, to be made at various points.

SEC. 2. That the Secretary of War is hereby directed to cause examinations or surveys, or both, to be made at the following points, namely:

- At the outlet of point Judith lake, Rhode Island;
- At Crow shoals, Delaware bay, near Cape May light, New Jersey, for an artificial harbor or breakwater;
- Harlem river, near the East river, New York, for removal of rocks therefrom;
- Of the piers and connecting bridges at Chester, Pennsylvania;
- The Penobscot river, from Oldtown to Medway and vicinity, Maine;
- The Galena river, from its mouth to upper bridge in city of Galena, Illinois;
- The harbor at Fall River, Massachusetts, for removal of rocks therefrom;
- At Wood's hole, in Buzzard's bay, Massachusetts, for removal of rocks therefrom;
- Old House channel to main channel of Pamlico sound, North Carolina;

The harbor of Washington, North Carolina;

At bayou Lafourche, Louisiana, from Lafourche crossing to the mouth;

From mouth of Red River down Atchafalaya river to Brashear in Louisiana;

At the entrance of Matagorda bay and the channel to Indianola, Texas;

Pine river, Saint Clair county, Michigan;

Monistique [Manistique] harbor, Lake Michigan;

Sebawing [Sebewaing] river, Michigan;

Yamhill river, Oregon;

The mouth of the Coquille river, Oregon;

Red river, from Morehead to Pembina;

At the mouth of Kewaunee river, Wisconsin;

At Elk river, Maryland, below Elkton;

At Raritan river, New Jersey, below New Brunswick, including the shoals called the Middle Ground;

The Youghiougheny river, Pennsylvania;

Aroostook river, Maine, for improvement of the channel;

At San Antonio creek, San Francisco bay, California;

Santa Cruz, California;

Estero bay^[a], near Santa Barbara, California.

And not to exceed five thousand dollars of the above appropriation may be expended in an exploration of routes for the extension of the Chesapeake and Ohio canal to the Ohio river, by the north and south branches of the Potomac river.

Extension of
Chesapeake and
Ohio Canal.

For connecting the inland waters along the margin of the Gulf of Mexico, from Donaldsonville, in Louisiana, to the Rio Grande river, in Texas, by cuts and canals, not to exceed twenty thousand dollars of the amount herein appropriated for surveys of rivers and harbors;

Connecting in-
land waters
along Gulf of
Mexico from,
etc.

At Great Pee Dee River, from Pine Bluff to Cheraw, South Carolina;

At Ashley river, South Carolina;

At Cleveland, Ohio, for the construction of a harbor of refuge;

At Forked Deer river, below Dyersburg, Tennessee;

At harbor at Wilson, on Lake Ontario, New York;

At East Pascagoula harbor, Mississippi sound;

At Portsmouth harbor, New Hampshire, for breakwater between Gerrish's island and Wood island;

In Ipswich bay, Massachusetts, at Hodgkins' cove, to ascertain the practicability of a harbor of refuge by building a breakwater there.

SEC. 3. That the Secretary of War is hereby authorized and required to detail from the engineer corps, one or more engineers, whose duty it shall be to inquire into and report upon the practicability of bridging, consistently with the interests of navigation, the channel between Lake Huron and Lake Erie, at such points as may be needful for the passing of railroad trains across said channel, and also its

Inquiry and re-
port upon prac-
ticability of
bridging chan-
nel between
lakes Huron and
Erie.

^a Known also as El Estero.

Amount of navigation in channel; extent of spans.

effect upon the navigation of the same; and further, to inquire into the number and character of the vessels navigating said channel, and the number of trips made by each, and, if said bridging be practicable, to report what extent of span or spans and elevation above the water will be required in the construction of such bridge or bridges, so as not seriously to injure the navigation of said channel.

Appropriation for pier at Lewes, Del., extended. 1870, c. 292, § 12; 1871, c. 21, § 10; 1872, c. 172, § 4.

SEC. 4. That the appropriation for building the pier at Lewes, Delaware, contained in the act approved July fifteenth, eighteen hundred and seventy, an act entitled "An act making appropriations for sundry civil expenses of the Government for the year ending June thirtieth, eighteen hundred and seventy-one, and for other purposes," be, and the same is hereby, extended until June thirtieth, eighteen hundred and seventy-four.

Approved, March 3, 1873.

Mar. 3, 1873.
Vol. 17, p. 606.

CHAP. 278.—An Act For the protection of owners of saw-mills on the Mississippi River.

R. S., 5254.

Owners of saw-mills on Mississippi River may build cribs to protect mills and rafts. Amended 1882, c. 112.
Post, p. 857.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the owners of saw-mills on the Mississippi River^a be, and they hereby are, authorized and empowered, under the direction of the Secretary of War, to construct or build piers or cribs in front of their mill property on the banks of said river, for the protection of their mills and rafts against damage by floods and ice: *Provided however*, That the piers or cribs so constructed shall not interfere with or obstruct the navigation of said river: *Provided further*, That in case by reason of the shifting of the channel of the said river, or from any other cause, the piers or cribs, the construction of which are authorized by this act shall be found to obstruct the navigation of said river at any time, the government expressly reserves the right to remove, or direct the removal of any such piers or cribs at the cost and expense of the owners thereof.

Approved, March 3, 1873.

Mar. 3, 1873.
Vol. 17, p. 627.

CHAP. 323.—An Act Extending the time for the completion of the Portage Lake and Lake Superior Ship Canal.

Time for completing Portage Lake and Lake Superior Ship Canal extended. 1865, c. 102; 1866, c. 161; 1869, res. 16; 1871, res. 47; 1872, c. 66.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the time for the completion of the Portage Lake and Lake Superior ship canal be and the same is hereby extended to the first day of December, anno Domini eighteen hundred and seventy-three.

Approved, March 3, 1873.

^a Amended by act approved May 1, 1882, to include St. Croix River, Wisconsin and Minnesota.

CHAP. 335.—An Act For the relief of Horace Tyler.

Mar. 3, 1873.

Vol. 17, p. 740.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury, out of any money in the treasury not otherwise appropriated, do pay to Horace Tyler, of New Orleans, of the State of Louisiana, the sum of thirty-four thousand nine hundred and eighty-eight dollars and fifty-three cents, in full satisfaction for all work done by him or by his authority on the bar at the mouth of the southwest pass of the mouth of the Mississippi river, and for all claims under and by virtue of a contract entered into between him and Brevet Lieutenant-Colonel M. D. McAlester, of the date of fifth November, eighteen hundred and sixty-six.

Payment to
Horace Tyler for
work at South-
west Pass, Mis-
sissippi River.

Approved, March 3, 1873.

CHAP. 371.—An Act For the relief of Orville J. Jennings.

Mar. 3, 1873.

Vol. 17, p. 772.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to pay to Orville J. Jennings, of Fulton, New York, out of any money in the treasury not otherwise appropriated, the sum of eight thousand one hundred and thirty-two dollars and ninety-five cents, in full for work performed in removing what was known as the "debris of the old outer breakwater," in the harbor of Dunkirk, New York, under a contract with Captain F. Harwood, of the engineer corps, United States Army, dated the thirtieth day of December, eighteen hundred and sixty-eight.

Payment to
Orville J. Jen-
nings for work in
Dunkirk Harbor,
N. Y.

Approved, March 3, 1873.

CHAP. 39.—An Act To dredge and protect the navigable channel at the mouth of Buffalo River against the sand-bar formed by the gale of December, eighteen hundred and seventy-three.

Feb. 25, 1874.

Vol. 18, pt. 3, p. 18.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, the sum of twenty thousand dollars, to be expended by the Secretary of War for the purpose of dredging and protecting the navigable channel at the mouth of Buffalo River, and of removing the sand-bar formed by the great gale of December last at that point, said sum to be available upon the passage of this act.

Appropriation
for dredging in
Buffalo Harbor,
N. Y.

Approved February 25, 1874.

Feb. 27, 1874.
Vol. 18, pt. 3, p. 532.

CHAP. 41.—An Act For the relief of Henry S. Welles.

Payment to H. S. Welles for expenditures made under contract for improving Savannah Harbor, Ga.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized and directed to pay Henry S. Welles one hundred and ninety-three thousand one hundred and thirty-two dollars and ninety-six cents^[a], out of any moneys in the Treasury not otherwise appropriated, for expenditures made by him under his contracts of May first and July fifth, eighteen hundred and sixty-six, for removing obstructions from the Savannah river, and improving the harbor, prior to the date of the annulment of said contracts by the Secretary of the Treasury, which said sum shall be in full satisfaction to said Welles for all claims referred to in the report and recommendation from the Secretary of War.

Approved, February 27, 1874.

Apr. 3, 1874.
Vol. 18, pt. 3, p. 26.

CHAP. 75.—An Act To improve the mouth of the Mississippi River.

Appropriation for mouth of Mississippi River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of thirty thousand dollars, to be expended by the Secretary of War at the mouth of the Mississippi River; said sum to be available from and after the passage of this act.

Approved, April 3, 1874.

May 11, 1874.
Vol. 18, pt. 3, p. 43.

CHAP. 165.—An Act Providing for the payment of the bonds of the Louisville and Portland Canal Company.

Payment of debts of Louisville and Portland Canal Company continued.
1873, c. 233.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the appropriations made by the act approved March third, eighteen hundred and seventy-three, entitled "An act making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes," for the payment of the debts of the Louisville and Portland Canal Company, are hereby continued in full force, and are made permanently applicable to the payment of the debts of the said Louisville and Portland Canal Company; and so much as may be necessary shall be applied to the payment of the interest as it accrues, and the principal of the outstanding bonds of the said company as they mature: *Provided, however, That the Secretary of the Treasury may purchase and pay for any of said bonds, at the market price, not above par,**

Purchase of bonds.

^a The records of this office credit this entire appropriation to Savannah Harbor.

whenever he deems it for the interest of the United States^[a].

SEC. 2. That after thirty days from the passage of this act the Secretary of War is hereby authorized and directed to take possession of the said Louisville and Portland Canal, and all the property, real and personal, of said company, as the property of the United States, as provided for by the act of the general assembly of the State of Kentucky, approved February twenty-second, eighteen hundred and forty-four, entitled "An act to amend an act entitled 'An act to amend the charter of the Louisville and Portland Canal Company,' approved January twenty-first, eighteen hundred and forty-two," conceding jurisdiction over said canal to the United States, subject however, to the mortgage-lien on said property in favor of the trustees under said mortgage and the holders of the bonds issued under it; and the Secretary of the Treasury is hereby authorized to pay the directors of said company for the stock held by them, which payment shall be made forthwith by the Secretary of the Treasury, being the sum of one hundred dollars to each director, with interest thereon at six per centum per annum since the ninth day of February, eighteen hundred and sixty-four; and he is authorized and directed to cause a careful and full examination of all the receipts and disbursements of the said company to be made, and to collect, and, if necessary, to sue for, any money due to or held for the said company by the directors of said company, or the trustees under said mortgage, or by any person whatever. And said Secretary of the Treasury is hereby directed and empowered, immediately upon the passage of this act to give public notice in such manner as, in his judgment, will best effect the purpose, to all persons and corporations having debts of any nature against said Louisville and Portland Canal Company, except the bonded debt thereof, to present them to him on or before the first day of July, eighteen hundred and seventy-five; and any such debt not presented on or before said day shall be forever barred. And said Secretary is hereby directed and authorized to examine, audit, and, in his discretion, allow such debts, or any of them, being hereby vested with any power necessary to that end; and he shall embrace his action in the premises in his succeeding annual report: *Provided, however,* That no sum of money shall be paid by the Secretary of the Treasury on account of any claim for either city or State taxes assessed, or to be hereafter assessed, against said company, or against the said canal property, or any of its appendages.

Secretary of War to take possession.

Purchase of certain stock.

Examination of accounts.

Debts due company to be collected.

Debts of company to be presented to Secretary of Treasury on or before July 1, 1875.

Debts to be examined, audited, and allowed.

Report to Congress. No payment for taxes.

^a The amount expended in carrying into effect the provisions of this act and of those of the act approved March 3, 1873, on the same subject was \$1,675,354.31, exclusive of the expenditure of the whole of the specific appropriation of \$100,000 provided by the last-named law for completing the canal.

Use of canal to be free, except.

SEC. 3. That the said canal and property appertaining thereto shall be held for the common use and benefit of the people of the United States, free of all tolls and charges except such as are necessary to pay the current expenses of said canal, and to keep the same in repair; and for the present year they shall be at the rate of ten cents per ton capacity on vessels propelled by steam and five cents per ton on other vessels; and to ascertain what rates will pay current expenses after the present year, the Secretary of War shall, on the first Monday of January of each year, ascertain from the expenses of the previous year what tolls will probably pay the expenses of the current year; and he shall fix and declare the rate of tolls thus ascertained to be charged for the current year; and, until otherwise provided by law, the Secretary of War shall provide for the superintendence, management, and repair of said canal, and may apply the tolls so received, as far as may be necessary, to pay the current expenses of said canal; and he shall, in his next annual report, set forth such receipts and expenditures and the condition of said canal with a view to such legislation as may be necessary for the superintendence and management thereof; but no expenditure nor contract for expenditure of money shall be made under the authority of this section in any one year to an amount greater than the amount which may be received during such year from tolls on said canal.

Tolls for present year.

Future tolls.

Superintendence, etc.

Report to Congress.

Restriction on expenditure.

Trustees of mortgage bonds may commence proceedings making United States party.

SEC. 4. That if at any time it becomes necessary to enforce the lien of the mortgage upon said canal-property for the benefit of the bondholders, it shall be lawful for the trustees named in said mortgage, or any other trustees who may be appointed in pursuance of the laws of Kentucky, to commence proceedings therein in any court having jurisdiction thereof, with notice to the United States as terre tenant pro forma, and serve process upon any officer of the United States who shall have the superintendence of said canal, whose duty it shall be to notify the Attorney-General of the United States of such service; whereupon said Attorney-General shall enter an appearance in said case, and take all necessary steps to represent and defend the interests of the United States in such proceedings, so that the same may be conducted in the same manner and with the like effect as if the said Louisville and Portland Canal Company were still in existence as a corporation.

Approved, May 11, 1874.

June 1, 1874.

Vol. 18, pt. 3, p. 50. **CHAP. 201.**—An Act To facilitate the execution of, and to protect certain public works of improvement at the mouth of the Mississippi River.

Secretary of War to assume control of channel at mouth of Mississippi.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act the Secretary of War is directed to assume full control over the particular channel at the mouth of the Mississippi River in course of ex-

cavation or improvement by the Government of the United States, so far as may be necessary to the carrying on and protection of such excavation and improvement, and until the same be completed, and he may establish such regulations respecting the use of, or passage through, such channel as he shall deem needful to fully protect the channel and to facilitate the excavation, improvement and use thereof. Such regulations shall be promulgated by publication thereof for ten days consecutively in two daily papers published in New Orleans, Louisiana, and the same may in like manner be changed from time to time; and any person interfering with, or obstructing, or attempting to obstruct the said improvements, and any person who shall willfully or negligently strand or sink any boat or craft in said channel, or who shall willfully, or negligently obstruct said channel, or cause any impairment injury, filling up, or shoaling therein, shall be guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine not exceeding, five hundred dollars, or imprisonment for not more than six months, or both, in the discretion of the court.

May establish regulations.

Promulgation.

Penalty for interference, obstruction, etc.

Approved, June 1, 1874.

CHAP. 328.—An Act Making appropriations for the legislative, executive, and judicial expenses of the Government for the year ending June thirtieth, eighteen hundred and seventy-five, and for other purposes.

June 20, 1874.
Vol. 18, pt. 3, p. 85.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

SEC. 5. That from and after the first day of July, eighteen hundred and seventy-four, and of each year thereafter, the Secretary of the Treasury shall cause all unexpended balances of appropriations which shall have remained upon the books of the Treasury for two fiscal years to be carried to the surplus fund and covered into the Treasury: *Provided*, That this provision shall not apply to permanent specific appropriations, appropriations for rivers and harbors, * * * but the appropriations named in this proviso shall continue available until otherwise ordered by Congress, * * * *And provided further*, That this section shall not operate to prevent the fulfillment of contracts existing at the date of the passage of this act; and the Secretary of the Treasury shall, at the beginning of each session, report to Congress, with his annual estimates, any balances of appropriations for specific objects affected by this section that may need to be re-appropriated.

Unexpended balances of appropriations remaining for two years to be covered into Treasury.

Certain specific appropriations excepted.

Appropriations available until otherwise ordered by Congress.

Existing contracts not affected.

Secretary of Treasury to report balances, etc., annually to Congress.

Approved, June 20, 1874.

H. Doc. 425, 58-3—15

June 22, 1874.
Vol. 18, pt. 3, p. 199.

CHAP. 411.—An Act To provide for the appointment of a Commission of Engineers to investigate and report a permanent plan for the reclamation of the alluvial basin of the Mississippi River subject to inundation.

Commission of
Engineers to ex-
amine alluvial
basin of Missis-
sippi.

Designation of
president of Com-
mission.
Duty of Com-
mission.

Report to Con-
gress.

Compensation
of members ap-
pointed from
civil life.

Secretary.

Traveling ex-
penses, how paid.

Appropriation,
how to be dis-
bursed.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President be, and he is hereby, authorized and directed to assign three officers of the Corps of Engineers, United States Army, and to appoint two civil engineers eminent in their profession and who are acquainted with the alluvial basin of the Mississippi River, to serve as a board of commissioners; the president of said board to be designated by the President of the United States. It shall be the duty of said commission to make a full report to the President of the best system for the permanent reclamation and redemption of said alluvial basin from inundation, which report the President shall transmit to Congress at its next session with such recommendations as he shall think proper.

SEC. 2. That the members of the commission who may be appointed from civil life shall receive compensation at the rate of five thousand dollars per annum. The commission may employ a secretary at a rate of compensation not exceeding two hundred dollars per month for the time he is employed, and the necessary traveling expenses of the members of said commission not officers of the Army, and of the secretary, shall be paid upon the approval of bills for the same by the Secretary of War.

SEC. 3. That the sum of twenty-five thousand dollars, or so much thereof as may be necessary to carry into effect the foregoing provisions is hereby appropriated, and shall be subject to disbursement by the Secretary of War in accordance with the provisions of this act.

Approved, June 22, 1874.

June 23, 1874.
Vol. 18, pt. 3, p. 204.

CHAP. 455.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and seventy-five, and for other purposes.

Sundry civil
expenses for year
ending June 30,
1875.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-five, namely:

* * * * *

Resurvey of
Au Sable River.

For a resurvey of the Au Sable River, Michigan, and establishing dock-lines, not exceeding one thousand dollars, to be paid for from unexpended balance of appropriation heretofore made for the improvement of said river.

* * * * *

Approved, June 23, 1874.

CHAP. 457.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes.

June 23, 1874.
Vol. 18, pt. 3, p. 237.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the repair, preservation, and completion of the following public works hereinafter named:

For continuing the improvement of the entrance to the inner harbor of Du Luth, ten thousand dollars. Duluth.

For continuing the improvement of the harbor at Ontonagon, twenty-three thousand dollars. Ontonagon.

For continuing the improvement of the harbor at Marquette, fifteen thousand dollars. Marquette.

For continuing the improvement of the Fox and Wisconsin Rivers, three hundred thousand dollars. Not exceeding twenty-five thousand dollars of the above may be used for the purchase of such real estate as may be required for the right of way, or for flowing, in the completion of the Fox and Wisconsin improvement. Fox and Wisconsin rivers.
Part, how used.

For continuing the improvement of the harbor at Green Bay, Wisconsin, ten thousand dollars. Green Bay.

For continuing the improvement of the harbor at Menominee, Michigan and Wisconsin, twenty-five thousand dollars. Menominee.

For continuing the improvement of the harbor of refuge at the entrance of the Sturgeon Bay canal, ten thousand dollars. Sturgeon Bay Canal.

For continuing the improvement of the harbor at Two Rivers, Wisconsin, fifteen thousand dollars. Two Rivers.

For continuing the improvement of the harbor at Manitowoc, Wisconsin, ten thousand dollars. Manitowoc.

For continuing the improvement of the harbor at Sheboygan, Wisconsin, ten thousand dollars. Sheboygan.

For continuing the improvement of the harbor at Port Washington, Wisconsin, ten thousand dollars. Port Washington.

For continuing the improvement of the harbor at Racine, Wisconsin, ten thousand dollars. Racine.

For continuing the improvement of the harbor at Kenosha, Wisconsin, ten thousand dollars. Kenosha.

For continuing the improvement of the harbor at Chicago, seventy-five thousand dollars. Chicago.

For continuing the improvement of the harbor of Calumet, Illinois, twenty-five thousand dollars. Calumet.

For continuing the improvement of the harbor at Michigan City, Indiana, fifty thousand dollars. Michigan City.

For continuing the improvement of the harbor at Frankfort, Michigan, ten thousand dollars. Frankfort.

For continuing the improvement of the harbor at Manistee, Michigan, ten thousand dollars. Manistee.

For continuing the improvement of the harbor at Ludington, Michigan, twenty thousand dollars. Ludington.

- White River (Lake). For continuing the improvement of the harbor at White River, Michigan, ten thousand dollars.
- Muskegon. For continuing the improvement of the harbor at Muskegon, Michigan, ten thousand dollars.
- Grand Haven. For continuing the improvement of the harbor at Grand Haven, Michigan, fifty thousand dollars.
- Black Lake (Holland). For continuing the improvement of the harbor at Black Lake, Michigan, fifteen thousand dollars.
- Saugatuck. For continuing the improvement of the harbor at Saugatuck, Michigan, ten thousand dollars.
- South Haven. For continuing the improvement of the harbor at South Haven, Michigan, ten thousand dollars.
- St. Joseph. For continuing the improvement of the harbor at Saint Joseph, Michigan, two thousand dollars.
- St. Marys River, etc. For continuing the improvement of Saint Mary's River and Saint Mary's Falls Canal, two hundred thousand dollars.
- Cheboygan. For continuing the improvement of the harbor at Cheboygan, Michigan, fifteen thousand dollars.
- St. Clair River. For continuing the improvement of the Saint Clair River at the mouth of Black River, fifteen thousand dollars.
- Sand beach (Harbor Beach). For continuing the improvement of the harbor of refuge, Lake Huron, seventy-five thousand dollars.
- Monroe. For continuing the improvement of the harbor at Monroe, Michigan, ten thousand dollars.
- Detroit River. For removing bowlders and rock from the Detroit River, partly in Canadian waters, twenty-five thousand dollars.
- Toledo. For continuing the improvement of the harbor at Toledo, Ohio, seventy-five thousand dollars.
- Sandusky. For continuing the improvement of the harbor at Sandusky City, Ohio, twenty-five thousand dollars.
- Huron. For continuing the improvement of the harbor at Huron, Ohio, one thousand five hundred dollars.
- Vermilion. For continuing the improvement of the harbor at Vermilion, Ohio, three thousand dollars.
- Black River (Lorain). For continuing the improvement of the harbor at Black River, Ohio, twenty thousand dollars.
- Cleveland. For continuing the improvement of the harbor at Cleveland, Ohio, thirty thousand five hundred dollars.
- Grand River (Fairport). For continuing the improvement of the harbor at Grand River, Ohio, twenty thousand dollars.
- Ashtabula. For continuing the improvement of the harbor at Ashtabula, Ohio, thirty-five thousand dollars.
- Conneaut. For continuing the improvement of the harbor at Conneaut, Ohio, one thousand five hundred dollars.
- Rocky River. For preserving and continuing the work upon the pier at Rocky River, Ohio, ten thousand dollars.
- Dunkirk. For continuing the improvement of the harbor at Dunkirk, New York, thirty-five thousand dollars.
- Erie. For the improvement of the harbor at Erie, Pennsylvania, twenty thousand dollars.
- Buffalo. For continuing the improvement of the harbor at Buffalo, New York, seventy-five thousand dollars; and the Secretary of War is authorized to remove and prevent accumulations of sand at the entrance to said harbor, provided the

same can be done without expense or liability against the United States.

For continuing the improvement of the harbor at Olcott, New York, ten thousand dollars. Olcott.

For continuing the improvement of the harbor at Oak Orchard, New York, ten thousand dollars. Oak Orchard.

For continuing the improvement of the harbor at Pultneyville, New York, ten thousand dollars. Pultneyville.

For continuing the improvement of the harbor at Great Sodus Bay, New York, fifteen thousand dollars. Great Sodus Bay.

For continuing the improvement of the harbor at Little Sodus Bay, New York, fifteen thousand dollars. Little Sodus Bay.

For continuing the improvement of the harbor at Oswego, New York, seventy-five thousand dollars. Oswego.

For continuing the improvement of the harbor at Waddington, New York, ten thousand dollars. Waddington.

For continuing the improvement of the harbor at Ogdensburg, New York, six thousand dollars. Ogdensburg.

For continuing the improvement of the harbor at Plattsburgh, New York, five thousand dollars. Plattsburgh.

For continuing the improvement of the harbor at Burlington, Vermont, twenty-five thousand dollars. Burlington.

For continuing the improvement of the harbor at Swanton, Vermont, eight thousand dollars. Swanton.

For continuing the improvement of the Falls of Saint Anthony and for the improvement of the Mississippi River above the Falls of Saint Anthony, Minnesota, one hundred and fifty thousand dollars; and twenty-five thousand dollars of said amount shall be expended for the improvement of the Mississippi River above the Falls of Saint Anthony. Falls of St. Anthony.

For the survey or improvement of the Minnesota River, ten thousand dollars. Minnesota River.

For continuing the improvement of the Upper Mississippi River, twenty-five thousand dollars. Upper Mississippi.

For continuing the improvement of the Illinois River, seventy-five thousand dollars. Illinois River.

For continuing the improvement of the Des Moines Rapids, Mississippi River, four hundred thousand dollars. Des Moines Rapids.

For continuing the improvement of the Rock Island Rapids, Mississippi River, fifty thousand dollars. Rock Island Rapids.

For continuing the improvement of the Mississippi, Missouri, and Arkansas Rivers, one hundred thousand dollars. Mississippi, Missouri, and Arkansas rivers.

For continuing the improvement of the White River above Jacksonport, fifty thousand dollars. White River.

For continuing the improvement of the Osage River, Missouri, twenty-five thousand dollars. Osage River.

For continuing the improvement of the Mississippi River between the mouths of the Ohio and Illinois Rivers, two hundred thousand dollars; and fifteen thousand dollars of said amount shall be expended between the mouths of the Missouri and Illinois Rivers. Mississippi River.

For continuing the improvement of the Ohio River, one hundred and fifty thousand dollars; one-half of which shall be expended above and the other half below the Suspen- Ohio River.

Part may be expended, how. sion Bridge between Cincinnati, Ohio, and Covington, Kentucky; forty thousand dollars of the above amount that is to be expended above the Suspension Bridge may, if approved by the Chief of Engineers, be expended in a permanent improvement of navigation at Pittsburgh, Pennsylvania.

Wabash River. For continuing the improvement of the Wabash River,

Part may be used to extinguish claims, etc., of Wabash Navigation Co. twenty-five thousand dollars: *Provided*, That a portion of this appropriation, not exceeding nine thousand dollars, may be used by the Secretary of War, in his discretion, for the extinguishment of any right, title, or claim of the Wabash Navigation Company in the lock and dam at Grand Rapids, on said river, and other property said company may claim on said river, and for the extinguishment of any right said company may have to affect or interfere in any way with the navigation of said river; but no part of this appropriation shall be expended until said navigation company shall have relinquished all right to control or otherwise in any manner interfere with or affect the free navigation of said river.

Upper Monongahela River. For continuing the improvement of the Upper Monongahela River near Morgantown West Virginia, twenty-five thousand dollars.

Kanawha River. For continuing the improvement of the Great Kanawha River, West Virginia, twenty-five thousand dollars.

Tennessee River. For continuing the improvement of the Tennessee River above Chattanooga, twenty-five thousand dollars; and below Chattanooga, including Muscle Shoals, one hundred thousand dollars.

Mouth of Mississippi. For continuing the improvement of the mouth of the Mississippi River, one hundred and thirty thousand dollars.

Raft in Red River. For removing the raft in Red River, Louisiana, fifty thousand dollars.

Choctawhatchee River. For removing obstructions in the Choctawhatchie River, Alabama and Florida, five thousand dollars.

Mobile Harbor. For continuing the improvement of the harbor of Mobile Alabama, one hundred thousand dollars.

Savannah. For continuing the improvement of the harbor at Savannah, Georgia, fifty thousand dollars.

Chattahoochee and Flint rivers. For the improvement of the Chattahoochee and Flint Rivers, Georgia, twenty-five thousand dollars.

St. Johns River. Dredging. For continuing the improvement at the mouth of the Saint John's River, Florida, or may be used for dredging out the inside passage between the Saint John's and Nassau Inlet, ten thousand dollars.

Apalachicola River. For the improvement of the Apalachicola River, Florida, ten thousand dollars.

Baltimore. For continuing the improvement of the harbor at Baltimore, Maryland, seventy-five thousand dollars.

Chester River. For the improvement of Chester River, at Kent Island Narrows, Maryland, five thousand dollars.

Wicomico River. For continuing the improvement of the Wicomico River [^a], Maryland, five thousand dollars.

^a On the eastern shore.

- For the improvement of Elk River, Maryland, five thousand dollars. Elk River.
- For continuing the improvement at the mouth of the Occoquan River, Virginia, five thousand dollars. Occoquan River.
- For continuing the improvement at the mouth of Nomoni Creek, Virginia, six thousand dollars. Nomini Creek.
- For continuing the improvement of the Rappahannock River, Virginia, seven thousand dollars. Rappahannock River.
- For continuing the improvement of the James River, Virginia, fifty thousand dollars. James River.
- For continuing the improvement of the Appomattox River, Virginia, thirty thousand dollars. Appomattox River.
- For continuing the improvement of the south branch of Elizabeth River, Virginia, ten thousand dollars. Elizabeth River.
- For continuing the improvement of Nansemond River, Virginia, ten thousand dollars. Nansemond River.
- For continuing the improvement of the Roanoke River, North Carolina, five thousand dollars. Roanoke River.
- For continuing the improvement of the Cape Fear River, North Carolina, one hundred and fifty thousand dollars. Cape Fear River.
- For continuing the improvement of the Delaware River, and channel at Fort Mifflin Bar, fifty thousand dollars. Delaware River, etc.
- For continuing the improvement of the Delaware River between Trenton and Bordentown, ten thousand dollars.
- For the removal of obstructions in the harbor and the construction of a pier at New Castle, Delaware, ten thousand dollars. Pier at New-castle.
- For continuing the improvement of the harbor at Wilmington, Delaware, six thousand dollars. Wilmington, Del.
- For continuing United States pier in Delaware Bay near Lewes, Delaware, ten thousand dollars. Pier near Lew-es.
- For continuing the improvement of the Schuylkill River, twenty thousand dollars. Schuylkill River.
- For continuing the improvement of the Hudson River, New York, forty thousand dollars; and out of this appropriation the sum of seven thousand four hundred and sixty-two dollars may be paid by the Chief of Engineers to Emory R. Seward, in full payment for work done by him in removing the overslaugh rock in the Hudson River, under his contract made in eighteen hundred and seventy. Hudson River. Payment to Emory R. Sew-ard.
- For continuing the improvement of the Passaic River, New Jersey, twenty thousand dollars. Passaic River.
- For continuing the improvement by removing obstructions in the East and Harlem Rivers at or near Hell Gate, two hundred and twenty-five thousand dollars. Hell Gate.
- For continuing the improvement of the harbor at Wareham, Massachusetts, ten thousand dollars. Wareham.
- For continuing the improvement of the harbor at Hyanis, Massachusetts, five thousand dollars.
- For continuing the improvement of the Taunton River, Massachusetts, ten thousand dollars. Taunton River.
- For the improvement of the harbor at Fall River, Massachusetts, ten thousand dollars. Fall River.
- For continuing the improvement of the breakwater at Block Island, twenty thousand dollars. Block Island breakwater.

Newport.	For continuing the improvement of the harbor at Newport, Rhode Island, ten thousand dollars.
Wickford.	For continuing the improvement at the harbor at Wickford, Rhode Island, five thousand dollars.
Pawcatuck River.	For continuing the improvement of the Pawcatuck River, Rhode Island and Connecticut, ten thousand dollars.
Stonington.	For continuing the improvement of the harbor at Stonington, Connecticut, twenty thousand dollars.
Connecticut River.	For continuing the improvement of the Connecticut River, below Hartford, Connecticut, twenty thousand dollars.
Housatonic River.	For continuing the improvement of the Housatonic River, Connecticut, ten thousand dollars.
Bridgeport.	For continuing the improvement of the harbor at Bridgeport, Connecticut, twenty thousand dollars.
Norwalk.	For continuing the improvement of the harbor at Norwalk, Connecticut, ten thousand dollars.
Milford.	For the improvement of the harbor at Milford, Connecticut, five thousand dollars.
Channel between Staten Island and New Jersey.	That the sum of fifty thousand dollars is appropriated for the opening and improving of the channel between Staten Island and New Jersey.
St. Croix River, Me.	For continuing the improvement of the Saint Croix River, Maine, ten thousand dollars.
Machias River.	For continuing the improvement of the Machias River, Maine, ten thousand dollars.
Penobscot River.	For continuing the improvement of the Penobscot River; Maine, twenty thousand dollars.
Camden.	For continuing the improvement of the harbor at Camden, Maine, ten thousand dollars.
Kennebec River.	For continuing the improvement of the Kennebec River, Maine, twelve thousand dollars.
Portland, Me.	For continuing the improvement of the harbor at Portland, Maine, twenty thousand dollars.
Cocheco River.	For continuing the improvement of the Cocheco River, New Hampshire, ten thousand dollars.
Merrimack River.	For continuing the improvement of the Merrimack River, Massachusetts, ten thousand dollars.
Salem Harbor.	For continuing the improvement of the entrance of Salem Harbor, Massachusetts, ten thousand dollars.
Boston.	For continuing the improvement of the harbor at Boston Massachusetts, one hundred thousand dollars.
Plymouth.	For continuing the improvement of the harbor at Plymouth, Massachusetts, and for dredging, five thousand dollars.
Provincetown.	For continuing the improvement of the harbor at Provincetown, Massachusetts, six thousand dollars.
Lower Willamette and Columbia rivers.	For continuing the improvement of the Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea, twenty thousand dollars.
Upper Willamette River.	For continuing the improvement of the Upper Willamette River, Oregon, seven thousand five hundred dollars.
Upper Columbia River.	For continuing the improvement of the Upper Columbia River, twenty thousand dollars.

For continuing the improvement of the harbor at Galveston, Texas, sixty thousand dollars. Galveston.

For removing wrecks and rocks off the harbor of San Francisco, California, twenty-five thousand dollars. San Francisco.

For the improvement of Oakland Harbor, one hundred thousand dollars. Oakland.

For continuing the improvement of the harbor at Milwaukee, Wisconsin, ten thousand dollars. Milwaukee.

For continuing the improvement of Saginaw River Michigan, fifteen thousand dollars. Saginaw River.

That the appropriation under the act of March third, eighteen hundred and seventy-three, for the improvement of the harbors of Washington and Georgetown be made to apply to dredging the Virginia or Georgetown channel of the Potomac River above and below Long Bridge, and that the earth excavated therefrom be deposited so as to carry out as far as practicable the plan for improving the harbors of Washington and Georgetown, in accordance with the recommendation made to Congress December seventeenth, eighteen hundred and seventy-two, by a board of survey created by act of Congress approved March fifth, eighteen hundred and seventy-two. Improvement of Georgetown channel.
1872, c. 238.

For surveys and estimates for the improvements recommended by the Senate Select Committee on Transportation-Routes to the Seaboard, upon the four routes indicated in the report of said committee, and also upon a route from the mouth of the Youghioghny River, to continue the slack-water navigation up said river to its head-waters at the foot of the Alleghany Mountains, thence by canal to Cumberland, intersecting there the Chesapeake and Ohio Canal, two hundred thousand dollars, or so much thereof as may be necessary, to be expended under the direction of the Secretary of War in such manner as, in his judgment, will secure the greatest amount of exact information for each of said routes. 1872, c. 36.

For the improvement of the harbor at Charleston, South Carolina, eighteen thousand dollars. Survey, etc., of transportation routes to seaboard.

For examinations and surveys of rivers and harbors, and for incidental repairs at harbors for which there is no special appropriation, seventy-five thousand dollars. Charleston.

SEC. 2. That the Secretary of War is hereby directed to cause examinations or surveys, or both, to be made at the following points, namely: Examinations, etc., and incidental repairs.

Harbor of New Bedford, Massachusetts. Secretary of War to cause examinations and surveys to be made at certain points.

Cascades and Dalles of the Columbia River, Oregon, and Washington Territories, for the purpose of ascertaining the practicability and cost of constructing canals and locks at such points.

Skaget River, for removing jams, Washington Territory.

Yam Hill River, Oregon, for removing rocks and sand bars.

Snohomish River, for removing Jams, Washington Territory.

Chehallis River, for removing jams, Washington Territory

Tennessee River [^a], above the mouth of Holston-River to the Chilhowee Mountains, Tennessee.

Hiawassee River, below Benton, Tennessee

Urbanna Creek, Virginia, below Urbanna.

Black Warrior River, below the mouth of Locust Fork, Alabama.

Cahaba River, below Centreville, Alabama.

Nantucket Harbor Bar, Massachusetts.

Lamprey River, below Newmarket, New Hampshire.

Exeter River, below Exeter, New Hampshire.

Minnesota River, for further examination for improvement by canals, locks and dams.

Oconee River, from the Ocmulgee to Milledgeville, Georgia.

Chickahominy River, Virginia.

Hampton River, Virginia

Wolf Lake Cut, Indiana.

Snake River, Idaho, from Shoshonee Falls to Lewiston, examination and estimates for removing bowlders and other obstructions.

Sacramento River, below Tehama, California.

Feather River, below Marysville California.

Lake Winnipiseogee [Winnepesaukee], for placing buoys on obstructions, New Hampshire.

Smutty Nose Island, as to repair breakwater, Portsmouth, New Hampshire.

Pagan Creek, Virginia.

New River, from the lead-mines in Wythe County, Virginia, to the "Mouth of Wilson" in Grayson County, Virginia.

The Little Kanawha River, below Bull Town.

Chippewa River, below Chippewa Falls, Wisconsin.

Dakota River, between Southern Dakota Railroad and Northern Pacific Railroad, Dakota Territory.

Tombigbee River, by way of Big Bear Creek [^b], to the Tennessee to connect water communication.

Estuary in Santa Barbara Channel, about two miles north of Point Muger, California.

Cleveland breakwater, new estimate for four fathoms water, Ohio.

San Joaquin River, below Stockton, California.

Guyandotte River, below Logan Court House, West Virginia.

Cedar Bayou Bar; and ten thousand dollars are hereby appropriated for the improvement of Red Fish Bar, in Galveston Bay, Texas.

Withlacooche River, from mouth of Ocopilco River, Georgia.

^a Meaning the Little Tennessee River.

^b A tributary of Tennessee River; known also as Bear Creek, or River.

Ochalochnee [Ocklockonee] River, below Atlantic and Gulf Railroad, Georgia.

Red River, at Alexandria, Louisiana.

Harlem River, from Randall's Island, by way of Spuyten Duyvil Creek, to Hudson River, New York.

Blackwater River, Virginia.

Mouth of Kennebunk River, Maine.

Brazos River, below Waco, including the bar at its mouth.

Guadalupe River, below Gonzales, Texas.

St. Croix River, below St. Croix Falls, in Minnesota and Wisconsin.

The Red River of the North from Breckenridge to Moorhead.

Big Sandy River, below Piketon, Kentucky.

Twelve Pole River, below Wayne Court House, West Virginia.

Harbor of Hingham, Massachusetts, with reference to removal of obstructions.

Sebawaing River, Michigan, for entrance, with eight feet water.

Mouth of Saginaw River, Michigan.

French Broad River, North Carolina, from Brevard to Buncombe County line.

Big Sandy River, from its mouth to Piketon, and to Warfield, in Kentucky.

Rock Castle River, Kentucky, from the foot of the narrows at Graham's Mills, to its mouth,

Smith's Shoals, in the Cumberland River, Kentucky.

Inside passage, between Fernandina and St. John's River, known as Nassau River, Florida.

Grand Marias Harbor, Lake Superior, Minnesota.

Pamunkey River, Virginia.

Mataponi River, Virginia.

Little Wicomico River, Virginia.

Totuskee [Totuskey] River, Virginia, below the bridge.

Survey of Harbor of Crisfield, Somerset County, Maryland, with a view of removing obstructions.

Harbor of Leonardtown, Britton [Breton] Bay, Potomac River, Maryland, with a view to remove obstructions.

Harbor of Norfolk, Virginia.

SEC. 3. That a board of engineers, to be composed of three from the Army, one from the Coast Survey, and three from civil life, be appointed by the President; which said board shall make a survey of the mouth of the Mississippi River, with a view to determine the best method of obtaining and maintaining a depth of water sufficient for the purposes of commerce, either by a canal from said river to the waters of the Gulf, or by deepening one or more of the natural outlets of said river; and said board shall make a full and detailed estimate and statement of the cost of each of said plans, and shall report the same, together with their opinion thereon, showing which of all

Board of Engineers to survey mouth of Mississippi.
Duties of Board.

Report to Secretary of War for presentation to Congress.

said plans they deem preferable, giving their reasons therefor, to the Secretary of War, to be presented at the commencement of the second session of the Forty-third Congress; and that the sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated, out of any funds in the Treasury not otherwise appropriated, to defray the cost of said survey.

Approved, June 23, 1874.

June 23, 1874.
Vol. 18, pt. 3, p. 250.

CHAP. 460.—An Act To provide for the improvement of the Oostenaula River, in the State of Georgia.

Improvement of Oostenaula River.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of ten thousand dollars be, and the same is hereby, appropriated out of the money in the treasury of the United States, for the improvement of the Oostenaula River, in the State of Georgia.

Approved, June 23, 1874.

Mar. 3, 1875.
Vol. 18, pt. 3, p. 456.

CHAP. 134.—An Act Making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes.

River and harbor appropriations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended under the direction of the Secretary of War, for the repair, preservation, and completion of the following public works hereinafter named:

Duluth. For dredging the inside harbor at Duluth, thirty-five thousand dollars.

Ontonagon. For the improvement of the harbor at Ontonagon, twenty-five thousand dollars.

Eagle. For the improvement of Eagle Harbor, ten thousand dollars.

Marquette. For the improvement of the harbor at Marquette, fifteen thousand dollars.

Fox and Wisconsin rivers.

For the improvement of the Fox and Wisconsin Rivers, five hundred thousand dollars.

Green Bay. For the improvement of the harbor at Green Bay, ten thousand dollars.

Menominee. For the improvement of the harbor at Menominee, twenty-five thousand dollars.

Ahnapee. For the improvement of the harbor at Ahnapee, Wisconsin, twenty-five thousand dollars.

Two Rivers. For the improvement of the harbor at Two Rivers, Wisconsin fifteen thousand dollars.

Manitowoc. For the improvement of the harbor at Manitowoc, Wisconsin, ten thousand dollars.

For the improvement of the harbor at Sheboygan Wisconsin, twelve thousand dollars.	Sheboygan.
For the improvement of the harbor at Port Washington, Wisconsin, ten thousand dollars.	Port Washington.
For the improvement of the harbor at Milwaukee, twenty-five thousand dollars.	Milwaukee.
For the improvement of the harbor at Racine, Wisconsin ten thousand dollars.	Racine.
For the improvement of the harbor at Kenosha, Wisconsin fifteen thousand dollars.	Kenosha.
For the improvement of the harbor at Chicago, Illinois seventy-eight thousand dollars.	Chicago.
For the improvement of the harbor at Calumet, Illinois, twenty-five thousand dollars.	Calumet.
For the improvement of the harbor at Michigan City, Indiana fifty thousand dollars.	Michigan City.
For the improvement of the harbor at Frankfort, Michigan, ten thousand dollars.	Frankfort.
For the improvement of the harbor at Manistee, Michigan, twenty-five thousand dollars.	Manistee.
For the improvement of the harbor at Ludington, Michigan ten thousand dollars.	Ludington.
For the improvement of the harbor at White River, Michigan ten thousand dollars.	White River (Lake).
For the improvement of the harbor at Muskegon, Michigan twenty-five thousand dollars.	Muskegon.
For the improvement of the harbor at Black Lake, Michigan fifteen thousand dollars.	Black Lake (Holland).
For the improvement of the harbor at Sargatuck Michigan, ten thousand dollars.	Saugatuck.
For the improvement of the harbor at South Haven, Michigan, ten thousand dollars.	South Haven.
For the improvement of Saint Mary's River and Saint Mary's Falls Canal, two hundred thousand dollars: of which sum not to exceed forty thousand dollars may be used in the settlement of such claims of the contractors, Barker Williams and Bangs, and Barker and Williams, for damages and delays in the time of commencing work on said canal during the existence of their contracts, as the Secretary of War, on the report of the Engineer Department, shall judge to be just and equitable.	St. Marys River, etc.; part, how may be used.
For the improvement of the harbor at Cheboygan Michigan fifteen thousand dollars.	Barker, Williams & Bangs, Barker & Williams.
For the improvement of Saint Clair River, at the mouth of Black River, Michigan, ten thousand dollars.	Cheboygan.
For the improvement of the Harbor of Refuge, Lake Huron, one hundred thousand dollars.	St. Clair River.
For the improvement of the harbor at Monroe, Michigan, ten thousand dollars.	Sand beach (Harbor Beach).
For the improvement of Saginaw River, Michigan, thirty thousand dollars.	Monroe.
For the improvement of the harbor at Toledo, Ohio, seventy-five thousand dollars.	Saginaw River.
	Toledo.

- Sandusky. For the improvement of the harbor at Sandusky City, Ohio, twenty-five thousand dollars.
- Huron. For the improvement of the harbor at Huron, Ohio, one thousand dollars.
- Vermillion. For the improvement of the harbor at Vermillion, Ohio, ten thousand dollars.
- Black River (Lorain). For the improvement of the harbor at Black River, Ohio, ten thousand dollars.
- Grand River (Fairport). For the improvement of the harbor at Grand River, Ohio, fifteen thousand dollars.
- Ashtabula. For the improvement of the harbor at Ashtabula, Ohio, twenty-five thousand dollars.
- Conneaut. For the improvement of the harbor at Conneaut, Ohio, one thousand dollars.
- Erie. For the improvement of the harbor at Erie, Pennsylvania, eighty thousand dollars.
- Port Clinton. For the improvement of the harbor at Port Clinton, Ohio, five thousand dollars.
- Rocky River. For the improvement of the harbor at Rocky River, Ohio, fifteen thousand dollars.
- Dunkirk. For the improvement of the harbor at Dunkirk, New York thirty-five thousand dollars.
- Hudson River. For dredging the mud bars in the Hudson River in front of Jersey City, twenty-five thousand dollars.
- Buffalo; part, how may be used. For the improvement of the harbor at Buffalo, New York one hundred thousand dollars; and out of this appropriation the Chief of Engineers may pay Daniel E. Bailey, the sum of twenty-three thousand two hundred and eighty-seven dollars and seventy-six cents for work done by him upon such improvement in eighteen hundred and seventy-three and eighteen hundred and seventy-four, and for which he has not been paid, in full satisfaction thereof.
- Daniel E. Bailey. For the improvement of the harbor at Olcott, New York ten thousand dollars.
- Olcott. For the improvement of the harbor at Olcott, New York ten thousand dollars.
- Oak Orchard. For the improvement of the harbor at Oak Orchard, New York, ten thousand dollars.
- Pier at New Castle. For the construction of an additional pier in the ice harbor at New Castle, Delaware, twenty-thousand dollars.
- Pier at Lewes, Del. For the continuation of the construction of the United States pier at Lewes, Delaware, twenty-five thousand dollars.
- Charlotte. For the improvement of the harbor at Charlotte, New York, five thousand dollars.
- Crisfield. For the improvement of the harbor at Cristfield, Maryland, thirty-seven thousand three hundred and seventeen dollars and fifty cents.
- Pultneyville. For the improvement of the harbor of Pultneyville New York, ten thousand dollars.
- Great Sodus Bay. For the improvement of the harbor at Great Sodus Bay, New York, ten thousand dollars.
- Little Sodus Bay. For the improvement of the harbor at Little Sodus Bay, New York, ten thousand dollars.
- Oswego. For the improvement of the harbor at Oswego, New York, ninety thousand dollars.

For the improvement at the harbor at Ogdensburgh, New York, five thousand dollars. Ogdensburgh.

For the improvement of the harbor at Burlington, Vermont twenty-five thousand dollars. Burlington.

For the improvement of the harbor at Swanton, Vermont ten thousand dollars. Swanton.

For the improvement of Otter Creek, Vermont, five thousand dollars. Otter Creek.

For the improvement of the Falls of Saint Anthony, Minnesota, one hundred thousand dollars; and twenty-five thousand dollars of said amount may be expended for the improvement of the Mississippi River above the Falls of Saint Anthony. Falls of St. Anthony.
Part expended, how.

For the improvement of the Minnesota River, ten thousand dollars. Minnesota River.

For the improvement of the Upper Mississippi River twenty-five thousand dollars. Upper Mississippi River.

For the improvement of the Illinois River, seventy-five thousand dollars. Illinois River.

For the improvement of the Des Moines Rapids, Mississippi River, four hundred and eighty thousand dollars. Des Moines Rapids.

For the improvement of the Rock Island Rapids, Mississippi River, fifty thousand dollars. Rock Island Rapids.

For the improvement of the Mississippi, Missouri, and Arkansas Rivers, one hundred thousand dollars. Mississippi, Missouri, and Arkansas rivers.

For the improvement of the Mississippi River, between the mouths of the Illinois and Ohio Rivers, two hundred thousand dollars: fifteen thousand dollars of said amount shall be expended between the mouths of the Illinois and Missouri Rivers; and fifteen thousand dollars of said amount may be expended at Liberty Bar. Mississippi River, between mouths of Illinois and Ohio; how portion to be expended.

For completing the improvement of the Falls of the Ohio River and Louisville Canal, one hundred thousand dollars. Falls of Ohio and Louisville and Portland Canal.

For the improvement of the Ohio River, three hundred thousand dollars; that one hundred thousand dollars of this amount shall be used for and applied toward the construction of a "movable dam," or a dam with adjustable gates for the purpose of testing substantially the best method of improving permanently the navigation of the Ohio River and its tributaries; the location of this work with the plan of construction and the application of the amount hereby appropriated to be submitted to the Secretary of War, for his approval. Ohio River; how part to be used.

For the improvement of the Wabash River, forty thousand dollars. Wabash River.

For the improvement of the Upper Monongahela River, near Morgantown, West Virginia, twenty-two thousand dollars. Upper Monongahela River.

For the improvement of the Great Kanawha River, West Virginia, three hundred thousand dollars. Kanawha River.

For the improvement of the Tennessee River, above Chattanooga, forty thousand dollars, and below Chattanooga, Tennessee River.

including the Muscle Shoals, three hundred and sixty thousand dollars.

Cumberland River. For the improvement of the Cumberland River, below Nashville, twenty-five thousand dollars.

Yazoo River. For the improvement of the Yazoo River, twelve thousand dollars.

Mouth of Mississippi. For the improvement of the mouth of the Mississippi River, two hundred and fifty thousand dollars, *provided*: That this appropriation shall cease to be available when its necessity is superceded by any other work of improvement authorized by law.

Red Fish bar. For the improvement of Red Fish Bar, in Galveston Bay, Texas, ten thousand two hundred dollars.

Raft in Red River. For removing the Raft in Red River, twenty thousand dollars.

Mobile. For the improvement of the harbor at Mobile, Alabama, twenty-six thousand dollars.

Cedar Keys. For the improvement of the harbor at Cedar Keys, Florida, fifteen thousand dollars.

Chattahoochee and Flint rivers. For the improvement of the Chattahoochee and Flint River, Georgia, twenty-five thousand dollars.

Apalachicola River. For the improvement of the Apalachicola River, Florida, ten thousand dollars.

Choctawhatchee River. For the improvement of the Choctawhatchie River, Florida and Alabama, five thousand dollars.

Charleston. For the improvement of the harbor at Charleston, South Carolina, ten thousand dollars.

Savannah. For the improvement of the harbor at Savannah, Georgia, seventy thousand dollars.

Oostenauala and Coosawattee rivers. For the improvement of the Oostanoola and Coosawattee Rivers, Georgia, five thousand dollars.

Elk River. For the improvement of Elk River, Maryland, five thousand dollars.

Baltimore. For the improvement of the harbor at Baltimore, Maryland, seventy-five thousand dollars.

Wicomico River. For the improvement of the Wicomico River [^a], Maryland, five thousand dollars.

Occoquan River. For the improvement of Occoquan River, Virginia, five thousand dollars.

Aquia Creek. For the improvement of Aquia Creek, Virginia, two thousand dollars.

Nomini Creek. For the improvement of the mouth of Nomini, Virginia, five thousand dollars.

Rappahannock River. For the improvement of the Rappahannock River, Virginia, five thousand dollars.

James River. For the improvement of the James River, Virginia, fifty thousand dollars.

Elizabeth River. For the improvement of the South Branch of Elizabeth River, Virginia, five thousand dollars.

Nansemond River. For the improvement of the Nansemond River, Virginia, five thousand dollars.

^a On the eastern shore.

For the improvement of the Appomattox River, Virginia, thirty thousand dollars. Appomattox River.

For the improvement of Cape Fear River, North Carolina, one hundred and fifty thousand dollars. Cape Fear River.

For constructing United States Pier in Delaware Bay, near Lewes, Delaware, fifteen thousand dollars. Pier near Lewes.

For the improvement of Delaware River at Fort Mifflin Bar, twenty thousand dollars; and that any unexpended balance of the amount mentioned in the act making appropriations for the repair, preservation, and so forth, of certain public works, and so forth, approved March third, eighteen hundred and seventy-three, for the improvement of the channel of the Delaware River, at and near the Horse Shoe Shoals, be, and is hereby, appropriated, to be expended for the improvement of said river, at such places between Petty's Island and its mouth as the Chief of Engineers of the Army may order and direct. Delaware River. Unexpended balance.

1873. c. 233.

For the improvement of the Delaware River, New Jersey, between Trenton and White Hill, ten thousand dollars. Delaware River.

For the improvement of the harbor at Wilmington, Delaware, ten thousand dollars. Wilmington.

For the improvement of the Schuylkill River, twenty thousand dollars. Schuylkill River.

For the improvement of the Hudson River, New York, forty thousand dollars. Hudson River.

For the improvement of the Passaic River, New Jersey, twenty thousand dollars. Passaic River.

For removing obstructions in the East River and Hell Gate, New York, two hundred and fifty thousand dollars. East River and Hell Gate.

For the improvement of the East Chester Creek, New York, twelve thousand dollars. East Chester Creek.

For a harbor at Fort Jefferson, New York, fifteen thousand dollars. Port Jefferson.

For the improvement of the harbor at Wareham, Massachusetts, ten thousand dollars. Wareham.

For the improvement of Taunton River, Massachusetts, ten thousand dollars. Taunton River.

For the improvement of the harbor at Fall River, Massachusetts, ten thousand dollars. Fall River.

For the improvement of the breakwater at Block Island, Rhode Island, twenty thousand dollars. Block Island breakwater.

For the improvement of the harbor at Newport, Rhode Island, ten thousand dollars. Newport.

For the improvement of Pawcatuck River, Rhode Island and Connecticut, ten thousand dollars. Pawcatuck River.

For the improvement of the harbor at Stonington, Connecticut, twenty-five thousand dollars. Stonington.

For the improvement of the Connecticut River, below Hartford, Connecticut, twenty thousand dollars. Connecticut River.

For the improvement of the harbor at Milford, Connecticut, thirteen thousand dollars. Milford.

For the improvement of the Housatonic River, Connecticut, five thousand dollars. Housatonic River.

- Bridgeport. For the improvement of the harbor at Bridgeport, Connecticut, fifteen thousand dollars.
- Norwalk. For the improvement of the harbor at Norwalk, Connecticut, seven thousand dollars.
- Machias River. For the improvement of the Machias River, Maine, ten thousand dollars.
- New Haven. For the improvement of the harbor at New Haven, Connecticut, ten thousand dollars.
- Penobscot River. For the improvement of the Penobscot River, Maine, twenty-five thousand dollars; and out of this appropriation ten thousand dollars shall be expended at or near Bucksport Narrows.
- Camden. For the improvement of the harbor at Camden, Maine, ten thousand dollars.
- Kennebec River. For the improvement of the Kennebec River, Maine, fifteen thousand dollars.
- Portland, Me. For the improvement of the harbor at Portland, Maine, twenty thousand dollars.
- Richmond Island. For the improvement at Richmond Island, Maine, fifteen thousand dollars.
- Cocheco. For the improvement of the Cocheco River, New Hampshire, twenty-five thousand dollars.
- Merrimac River. For the improvement of the Merrimack River, Massachusetts, twelve thousand dollars.
- Boston Harbor. For the improvement of Boston Harbor, Massachusetts, one hundred thousand dollars; ten thousand dollars of said amount may be expended for the improvement of Hingham Harbor.
- Hingham Harbor. For the improvement of the harbor at Hingham, Massachusetts, ten thousand dollars.
- Plymouth. For the improvement of the harbor at Plymouth, Massachusetts, ten thousand dollars.
- Provincetown. For the improvement of the harbor at Provincetown, Massachusetts, five thousand dollars.
- Lower Willamette and Columbia rivers. For the improvement of the Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea twenty thousand dollars.
- Upper Willamette River. For the improvement of the Upper Willamette River, Oregon, twenty-five thousand dollars.
- Upper Columbia River. For the improvement of the Upper Columbia River, thirty-five thousand dollars.
- Breakwater at Wilmington. For the improvement of the breakwater at Wilmington, California, thirty thousand dollars.
- Oakland. For the improvement of Oakland Harbor, California, one hundred thousand dollars.
- San Diego. For the improvement of the harbor at San Diego, California, eighty thousand dollars.
- Breakwater at Cleveland. For a breakwater in five fathoms of water, to protect the commerce of Cleveland, Ohio, fifty thousand dollars.
- Galveston. For the improvement of the harbor at Galveston, Texas, one hundred and fifty thousand dollars.
- Sebewaing River. For the improvement of the Sebawaing River, Michigan, eight thousand dollars.
- Pine and St. Clair rivers. For dredging the bar at the junction of Pine and Saint Clair Rivers, Michigan, five thousand dollars.

- For the improvement of the harbor at New Bedford, Massachusetts, ten thousand dollars. New Bedford.
- For the improvement of the harbor at Wilson, New York, ten thousand dollars. Wilson.
- For the improvement of the Sacramento and Feather Rivers, California, fifteen thousand dollars. Sacramento and Feather rivers.
- For the improvement of the ship-channel between the mouth of San Jacinto River, to Bolivar Channel, in Galveston Bay, Texas, twenty-five thousand dollars. Shipchannel in Galveston Bay.
- For the improvement of Sabine Pass, Texas, twenty thousand dollars. Sabine Pass.
- For the improvement of the Harlem River, New York, ten thousand dollars. Harlem River.
- For the improvement of the harbor and river at Saint Joseph's, Michigan, thirty-five thousand dollars. St. Joseph.
- For the improvement of the Warrior and Tombigbee Rivers, Alabama, below Tuscaloosa and Demopolis, twenty-five thousand dollars, in addition to any unexpended balance remaining from the appropriation for the harbor of Mobile, hereby transferred to this improvement. Warrior and Tombigbee rivers.
- For the repair of the breakwater and piers at the harbor of Southport, Connecticut, five thousand dollars. Southport.
- For completing the improvement of the harbor at Waddington, New York, five thousand dollars. Waddington.
- For examination and surveys of rivers and harbors, and for incidental repairs at harbors for which there is no special appropriation, fifty thousand dollars. Examinations, etc., and incidental repairs.
- It shall be the duty of the Secretary of War to apply the moneys herein appropriated as far as may be by contract, except when specific estimates cannot be made for the particular work, or where, in the judgment of said Secretary, the work cannot be contracted at prices advantageous to the Government, and except the appropriations made for examinations and surveys; and such contracts shall be made after sufficient public advertisement for proposals in such form and manner as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders therefor, accompanied by such securities as the Secretary of War shall require. Secretary of War to apply moneys by contract as far as may be, etc.
- For completing the survey and estimates of the route from the mouth of the Youghiogeny River to continue the slackwater navigation up said river, to the head waters at the foot of the Allegheny mountains, thence by canal to Cumberland, intersecting there the Chesapeake and Ohio Canal, ten thousand dollars. Youghiogeny River.
- SEC. 2. That the Secretary of War is hereby directed to cause examinations, or surveys, or both, to be made at the following points, namely: Secretary of War to cause examinations and surveys at certain points,
- Alabama River, from Wetumpka to its mouth.
- East Branch [Anacostia River] of Potomac River, from the navy-yard to Bladensburg, District of Columbia.
- North^a and South Branches of the Shrewsbury River, New Jersey.

^a The North Branch is known also as Navesink River.

Puyallup River, from the Coal Mines to its mouth, Washington Territory.

Monongahela River, from Morgantown to Fairmount, West Virginia.

French Broad River, from its junction with the Holston at Knoxville to Leadvale, Tennessee.

Port Henry, Lake Champlain, for a breakwater.

Rouse's Point, Lake Champlain, for a breakwater.

Lower Pier, Chester, Pennsylvania.

Monterey, California.

Mouth at Nehalem River, Oregon, Alsea River and bar, Oregon.

For examination for a route for a canal sufficient to allow the passage at ordinary high tide, of steamers drawing ten feet, connecting the waters of Shoal Water Bay [Willapa Harbor] with the waters of the Columbia River: *Provided*, That no more than five hundred dollars shall be expended in making such survey and estimate.

Alleghany River, below Freeport, Pennsylvania.

Thunder Bay River^a, Lake Huron.

Little Narragansett Bay, between Dennison Rocks and Rhode's Folly, Rhode Island and Connecticut.

For examination for a route for a canal from Lake Michigan to the Wabash River, Indiana, not exceeding the expense of two thousand dollars.

Clinch River, below the mouth of Emory River, and Emory River above its mouth, for removal of bars, Tennessee

Clinton River, from Mount Clemens to its mouth, Michigan.

For estimate of cost to obtain thirteen feet of water on the outer bar at the mouth of Saginaw River, Michigan.

Waddington, New York, for the purpose of ascertaining the practicability and cost of constructing a canal and locks around the rapids in the Saint Lawrence River at that point.

Survey of the channel of West Haven Harbor, near New Haven, Connecticut.

Pamlico River from its mouth to the town of Washington, North Carolina.

Neuse River from its mouth Goldsboro, North Carolina.

Pasquotank River, from Albemarle Sound to Elizabeth City, North Carolina.

Puquunnaus [Perquimans] River from its mouth to the town of Hartford [Hertford], North Carolina.

Belfast Bay and harbor, Maine.

Harbor Matinicus Island, Maine.

Alleghany River, near Pittsburg, Pennsylvania.

Ocmulgee River, Georgia, from the city of Macon to the city of Covington.

Catawba River, from South Carolina line to Old Fort, North Carolina.

^a The examination under this item covered the river's mouth, i. e., Alpena Harbor.

For surveys to ascertain the most eligible line on which a canal across the Isthmus of Florida can be constructed, and whether a safe land-locked navigation between the waters of the Mississippi and the Gulf along the coasts of Alabama, Louisiana, and Florida, and through the latter State to the Atlantic coast, can be had. To estimate the probable cost and practicability of construction of such works, and of any artificial water-routes found necessary to provide a safe inland navigation between the Mississippi River and one of the seaports on the east coast of Florida.

Continuing survey of French Broad River, from the Henderson County line to its junction with the Holston, Tennessee.

The harbor at Edenton, North Carolina.

A line between the Neuse and Cape Fear Rivers, in North Carolina, with a view to connect the waters of the same. And a like line with a view to connect the waters of Norfolk harbor, in Virginia, with the waters of the Cape Fear River, at or near Wilmington, North Carolina.

Louisa [Levisa] Fork of Sandy, from the mouth of Dismal, in Buchanan County, Virginia, to Piketon, Kentucky.

Powell's River, from the three forks in Wise County, Virginia, to the mouth of Clinch River, Tennessee.

Clinch River, from the mouth of Indian, in Tazewell County, Virginia, to the junction of Clinch and Powell Rivers, Tennessee.

Elk River, from its mouth to Braxton Court-House, West Virginia.

Missouri River, at the point where it is cutting into the Kansas shore above Saint Joseph's, Missouri.

For breakwater off the mouth of Au Sable River, Lake Huron.

The piers at Marcus Hook, Pennsylvania.

Tennessee River^a, from the Chilhowee Mountains to the Georgia line, in Macon County, North Carolina.

Ipswich River and harbor, Massachusetts, and estimates of cost for dredging the river as to give nine feet depth at low water.

Mouth of Big Sandy Creek, New York.

Chippewa River, Wisconsin.

Echo Harbor, New Rochelle, New York.

SEC. 3. That the Secretary of War shall convene a board of engineers to examine, and report at the next session of Congress, a plan for the improvement of the channel between Staten Island and New Jersey.

SEC. 4. That James B. Eads, of Saint Louis, Missouri, be, and he is hereby, authorized, with such others as may be associated with him, on the conditions hereinafter mentioned, to construct such permanent and sufficient jetties [*sic*], and such auxiliary works as are necessary to create and permanently maintain, as hereinafter set forth, a wide and deep channel between the South Pass of the Mississippi River

Board of Engineers to report plan for improvement of channel between Staten Island and New Jersey.

James B. Eads, and others, to construct jetties, etc., to maintain channel between South Pass of Mississippi River and Gulf of Mexico.

^a Meaning the Little Tennessee River.

and the Gulf of Mexico, and for that purpose he may construct, in the river, outlet, or pass, and likewise in the Gulf of Mexico, such walls, jettées [*sic*], dikes, levees, and other structures, & employ such boats, rafts, and appliances, as he may, in the prosecution of said work deem necessary:

Navigation not to be impeded.

Provided, That no such structures or means employed shall hinder, delay, or materially interfere with the free navigation of said pass; and, to protect his said works, he may build, and maintain such levees, or embankments as may be necessary to secure their permanency along the banks of

To be commenced in eight months.

the river or South Pass: *Provided further*, That unless the construction of the proposed work shall be substantially commenced within eight months from the date of the approval of this act, and prosecuted with due diligence, the provisions contained herein in relation to the said South

Navigable depth of 20 feet to be secured in thirty months.

Pass shall be null and void; and unless the said Eads and his associates shall secure a navigable depth of twenty feet of water through said pass within thirty months after the date of the approval of this act, Congress may revoke the privileges herein granted in relation to the said South Pass, and cancel the obligations herein assumed by the United States. And Congress may revoke the privileges herein granted in relation to the said South Pass, and cancel the obligations herein assumed by the United States, unless the said Eads and his associates shall, after securing

Two additional feet in depth to be secured each succeeding year until depth of 26 feet is secured.

twenty feet of water, secure an additional depth of not less than two feet during each succeeding year thereafter, until twenty-six feet shall have been secured: and in case said Eads and his associates shall fail to comply with the foregoing conditions, as to depth of water, and time for

Penalty of failure for one year in excess of time fixed.

and period of twelve months in excess of the time fixed, as aforesaid, then the privileges herein granted, and the obligations herein assumed in relation to the said South Pass, shall absolutely become absolutely null and void without action by Congress.

Amount paid.

SEC. . That the conditions herein prescribed being fully complied with, the United States hereby promise and agree to pay to said Eads, or to his assigns or legal representatives, five million two hundred and fifty thousand dollars for constructing said works and obtaining a depth of thirty feet in said channel, and the annual sum of one hundred thousand dollars for each and every year that said depth of thirty feet shall be maintained by the jettées [*sic*] and auxiliary works aforesaid in said South Pass during twenty years after first securing the said depth. Payments shall be made on certified statements of an engineer-officer, who shall be detailed by the Secretary of War, and whose duty it shall be to report the depth of water and width of channel secured and maintained from time to time in said channel, together with such other information as the Secretary of War may direct.

How payments to be made.

Examinations and surveys for reporting depths and widths.

Vols. 25, pp. 422, 424; 32, p. 340. *Post*, pp. 513, 516, 962.

When payments to be made.

When a channel of twenty feet in depth, and of not less than two hundred feet in width, shall have been obtained by the action of said jettées [*sic*] and auxiliary works, five hun-

dred thousand dollars shall be paid; and when a channel of twenty-two feet in depth and two hundred feet in width shall have been obtained by the action of said jetties [*sic*] and auxiliary works, five hundred thousand dollars shall be paid.

When a channel twenty-four feet in depth, and not less than two hundred and fifty feet in width, shall have been obtained, there shall be paid five hundred thousand dollars; and after said depth and width shall have been maintained during twelve consecutive months there shall be paid, there shall be paid two hundred and fifty thousand dollars with five per centum per annum interest from the date when said twenty-four feet were first obtained.

When a channel twenty-six feet in depth, and not less than three hundred feet in width shall be obtained, there shall be paid five hundred thousand dollars; and when a channel of said depth and width shall have been maintained for twelve months consecutively, two hundred and fifty thousand dollars shall be paid with interest at five per centum per annum from the date when said channel was first obtained.

When a channel twenty-eight feet in depth and not less than three hundred and fifty feet in width shall be obtained, there shall be paid five hundred thousand dollars; and after said depth and width shall have been maintained for twelve months consecutively, two hundred and fifty thousand dollars shall be paid with interest at six per centum per annum from the date when said twenty-eight feet were first obtained.

When a channel thirty feet in depth and not less than three hundred and fifty feet in width shall be obtained, there shall be paid five hundred thousand dollars; and after such depth and width shall have been maintained for twelve months consecutively, there shall be paid five hundred thousand dollars with interest at five per centum per annum from the date when a channel of said depth and width was first obtained; making a total aggregate of four millions two hundred and fifty thousand dollars for the aforesaid payments, the respective depths and widths of channel being measured at average flood-tide, as ascertained and determined by the Secretary of War.

When a channel thirty feet in depth and three hundred and fifty feet in width shall have been obtained by the effect of said jetties and auxiliary works aforesaid, the remaining one million dollars shall be deemed as having been earned by said Eads and associates; but said amount shall remain as security in the possession of the United States for the purposes hereinafter set forth, interest at five per centum per annum on the same being payable to said Eads, his assigns, and legal representatives, semi-annually, from the date when a channel of thirty feet in depth and three hundred and fifty feet in width shall have been first secured, so long as said money, or any part thereof, is held by the United States.

SEC. . That after said channel of thirty feet in depth and of not less than three hundred and fifty feet in width shall have been secured, one hundred thousand dollars per annum shall be paid in equal quarterly payments during each and every year that said channel of thirty feet in depth and three hundred and fifty feet in width shall have been maintained by said Eads and his associates by the effect of said jettées [*sic*] and auxiliary works aforesaid in said pass, for a period of twenty years, dating from the date on which said channel of thirty feet in depth and three hundred and fifty feet in width shall be first secured: *Provided, however,* That no part of such annual compensation shall be paid for any period of time during which the channel of said pass shall be less than thirty feet in depth and three hundred and fifty feet in width, as hereinbefore specified.

Proviso.

SEC. . That the said channel of thirty feet in depth and three hundred and fifty feet in width having been maintained for ten years, one-half of the one million dollars hereinbefore mentioned shall be released and paid to said Eads, his assigns, or legal representatives; and said depth and width having been maintained for ten additional years, the remaining half of the said one million dollars shall be released and paid as aforesaid. And if any of said money shall have been paid under the provisions of this act as hereinafter provided, then the residue shall be paid at the times above stated.

Money expended in excess of annual payments may be paid from money reserved, etc.

SEC. . That in case said Eads and associates in order to maintain a channel of thirty feet in depth and three hundred and fifty feet in width, shall deem it necessary to expend on said works, during any one or more of said twenty years, any money in excess of the annual payments received by them during said year or years under this act, the Secretary of War shall, on satisfactory proof of such expenditures, authorize, as often as such extra expenditures may require the payment of the same from the said money in pledge, to said Eads or his legal representatives.

And such payments shall be made from the five hundred thousand dollars to be released at the end of ten years before any payment shall be made from the five hundred thousand dollars to be released at the end of twenty years; and if any failure to maintain said channel of thirty feet in depth and three hundred and fifty feet in width shall occur, the date for releasing the said money held in pledge shall be postponed [*sic*] for an equal period of time, and the compensation for maintaining said channel shall cease until said depth and width shall be again restored, the maintenance of a channel of thirty feet in depth and three hundred and fifty feet in width for twenty years, exclusive of all such periods of failure, being intended by this act.

And at any time after said jettées shall have been completed, and said channel of thirty feet in depth and three hundred and fifty feet in width shall have been obtained,

that the United States may elect to pay the said one million dollars, and stop the payment of said interest and said annual sum of one hundred thousand dollars for the maintenance of said depth and width, said United States shall have the right to do so on payment of said money held as security and in pledge as aforesaid, together with the interest and annual compensation for maintenance which may be earned at the date of such final payment; and on such payment being made by the United States the supervision and maintenance of said jetties [*sic*] and auxiliary works by said Eads and associates, and all liability on their part shall cease and determine.

SEC. . That in order to facilitate the proper location of said jetties [*sic*], which shall not be less than seven hundred feet apart, and to correctly determine such effects as may be produced by them, the Chief of the Coast Survey shall, as soon as practicable, cause a careful topographic and hydrographic survey to be made of said pass and bar, and shall submit the same to the Secretary of War, who shall furnish to said Eads the results of any such survey. And the sum of five thousand dollars is hereby appropriated out of any money in the Treasury not otherwise appropriated for said survey and examination.

Survey to be made.

Appropriation

SEC. . That any person maliciously or intentionally injuring said works, or interfering with the construction thereof, shall be deemed guilty of a misdemeanor, and may be tried for such offense before the district court of the United States for the district wherein such offense may be committed; and, if found guilty, he shall be liable to a fine not exceeding one thousand dollars, or to imprisonment for not more than two years, or to both fine and imprisonment as aforesaid, for each offense.

Penalty for injury to works or interfering with construction.

SEC. . That the said Eads and his associates shall have the right under such regulations as the Secretary of War shall prescribe, to use any materials on the public lands of the United States that shall be suitable for, and may be needed in, the construction of said works.

Right to use materials on public lands.

SEC. . That in case of death or other disability of said Eads before the completion of said works, the same shall be prosecuted and completed by his legal representatives and his associates aforesaid, with the same powers, rights, obligations, and compensations as if done by him in person.

In event of death or disability of Mr. Eads, work to be prosecuted.

SEC. . That the Secretary of War be, and he is hereby authorized and directed to carry into effect the provisions of this act on behalf of the United States, and, when the said Eads and his associates shall, from time to time, have fulfilled on their part the several foregoing conditions of this act, to draw his warrants upon the Treasurer of the United States in favor of said Eads, or his legal representatives, in payment of the aforesaid amounts as they respectively become due by the provisions of this act.

Secretary of War to carry into effect provisions of act, and draw warrants in payment.

And it shall be the duty of the Secretary of War to embody in his annual reports the payments made from time to

Payments to be reported.

Reports of
progress of con-
struction.

time under this act, and the probable times when other payments will become due, and to report during the construction of the works herein authorized all important facts relating to the progress of the same, the materials used, and the character and permanency with which the said jettees [*sic*] and auxiliary works are being constructed, to the end that the Congress of the United States may be kept fully advised as to the faithfulness and efficiency with which the said works are being executed by the said Eads and associates, it being expressly understood that while said Eads shall be entrained in the exercise of his judgment and skill in the location, design, and construction of said jettees [*sic*] and auxiliary works, the intent of this act is not simply to secure the wide and deep channel first above named, but likewise to provide for the construction of thoroughly substantial and permanent works by which said channel may be maintained for all time after their completion.

If not being
constructed ac-
cording to act,
commission to be
appointed.

And in case the Secretary of War shall be of the opinion that this work is not being constructed according to the spirit and intent of this act, he shall report the same to the President, who shall appoint a commission, consisting of an officer of the Army, an officer of the Navy, and a competent person from civil life, to inspect and examine the works be-

If commission
report adversely;
facts to be laid
before Congress.

ing constructed by said Eads and his associates; and in case the said commission shall report that the works are being constructed upon a design that will not be of a substantial and permanent character when completed, all the facts in the case shall be laid before Congress at the earliest possible moment, and payments upon said works shall be suspended until Congress shall otherwise order.

Suspension of
payments.

Payments to be
made in money
or bonds at Gov-
ernment option.

SEC. . That the option of discharging the obligations herein assumed by the United States, either in money or bonds, is expressly reserved; and the Secretary of the Treasury is hereby directed to issue the bonds of the United States, bearing five per centum interest, of the character and description set out in the act entitled "An act to authorize the refunding of the public debt," approved July fourteenth, eighteen hundred and seventy, to said Eads or his legal representatives, in payment at par of the aforesaid warrants of the Secretary of War, unless the Congress of the United States shall have previously provided for the payment of the same by the necessary appropriations of money: *Provided*, That in no case shall the Government of the United States be liable for any losses incurred by said Eads and his associates in the performance of the work herein mentioned, nor shall any payments thereon be made in excess of the sums nor contrary to the terms hereinbefore prescribed.

United States
not liable for
losses.

Approved, March 3, 1875.

CHAP. 139.—An Act To enable the people of Colorado to form a constitution and State government, and for the admission of the said State into the Union on an equal footing with the original States. Mar. 3, 1875.
Vol. 18, pt. 3, p. 474.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the inhabitants of the Territory of Colorado included in the boundaries hereinafter designated be, and they are hereby, authorized to form for themselves, out of said Territory, a State government, with the name of the State of Colorado; which State, when formed, shall be admitted into the Union upon an equal footing with the original States in all respects whatsoever, as hereinafter provided.

Colorado made a State.

SEC. 12. That five per centum of the proceeds of the sales of agricultural public lands lying within said State which shall be sold by the United States subsequent to the admission of said State into the Union, after deducting all the expenses incident to the same, shall be paid to the said State for the purpose of making such internal improvements within said State as the legislature thereof may direct: *Provided*, That this section shall not apply to any lands disposed of under the homestead-laws of the United States, or to any lands now or hereafter reserved for public or other uses.

5 per cent of sales of public lands for internal improvements.

Proviso.

Approved, March 3, 1875.

CHAP. 152.—An Act Granting to railroads the right of way through the public lands of the United States. Mar. 3, 1875.
Vol. 18, pt. 3, p. 482.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the right of way through the public lands of the United States is hereby granted to any railroad company duly organized under the laws of any State or Territory, except the District of Columbia, or by the Congress of the United States, which shall have filed with the Secretary of the Interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of one hundred feet on each side of the central line of said road; also the right to take, from the public lands adjacent to the line of said road, material, earth, stone, and timber necessary for the construction of said railroad; also ground adjacent to such right of way for station-buildings, depots, machine shops, side-tracks, turn-outs, and water-stations, not to exceed in amount twenty acres for each station, to the extent of one station for each ten miles of its road.

Right of way, materials, station grounds, etc., granted to railroads.
Vol. 25, pp. 473, 654.
Post, pp. 532, 536.

SEC. 4. That any railroad-company desiring to secure the benefits of this act, shall, within twelve months after the location of any section of twenty miles of its road, if the same be upon surveyed lands, and, if upon unsurveyed

Profile of road claiming benefits, when to be filed.

Disposal of
lands subject to
right of way.

Forfeiture of
right.

lands, within twelve months after the survey thereof by the United States, file with the register of the land office for the district where such land is located a profile of its road; and upon approval thereof by the Secretary of the Interior the same shall be noted upon the plats in said office; and thereafter all such lands over which such right of way shall pass shall be disposed of subject to such right of way: *Provided*, That if any section of said road shall not be completed within five years after the location of said section, the rights herein granted shall be forfeited as to any such uncompleted section of said road.

* * * * *

Approved, March 3, 1875.

Mar. 3, 1875.
Vol. 18, pt. 3, p. 506.

CHAP. 166.—An Act To aid in the improvement of the Fox and Wisconsin rivers, in the State of Wisconsin.

[Repealed.]

Lands, etc., to
be taken posses-
sion of.
Vol. 25, p. 21.
Post, p. 476.

Damages.

Department of
Justice to repre-
sent United
States.

Part of appro-
priation may be
used in payment
for property, etc.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That whenever, in the prosecution and maintenance of the improvement of the Wisconsin and Fox Rivers in the State of Wisconsin, it becomes necessary or proper in the judgment of the Secretary of War to take possession of any lands, or the right of way over any lands, for canals and cut-offs, or to use any earth-quarries or other material lying adjacent or near to the line of said improvement and needful for its prosecution or maintenance, the officers in charge of said works may, in the name of the United States, take possession of and use the same, after first having paid or secured to be paid the value thereof, which may have been ascertained in the mode provided by the laws of the State wherein such property lies. In case any lands or other property is now or shall be flowed or injured by means of any part of the works of said improvement heretofore or hereafter constructed for which compensation is now or shall become legally owing, and in the opinion of the officer in charge it is not prudent that the dam or dams be lowered, the amount of such compensation may be ascertained in like manner. The Department of Justice shall represent the interests of the United States in legal proceedings under this act, and for fowage[sic]-damages hereinbefore occasioned.

SEC. 2. That a portion of the appropriation now made for the further prosecution of the improvement aforesaid, not exceeding in amount twenty-five thousand dollars, may be applied in payment for the property and rights taken and used as aforesaid.

Approved, March 3, 1875.

CHAP. 172.—An Act For the further security of navigation on the Mississippi River. Mar. 3, 1875.
Vol. 18, pt. 3, p. 510.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, authorized and directed to inquire into the expediency of causing shear-booms to be placed on the upper end of all or any bridge-piers on the Mississippi River, for the better security and convenience of the navigation of said river for rafts of logs and timber, with specific report in each case. Sheer booms on
bridge piers on
Mississippi
River.

Approved, March 3, 1875.

CHAP. 88.—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal years ending June thirtieth, eighteen hundred and seventy-six, and for prior years, and for other purposes. May 1, 1876.
Vol. 19, p. 41.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That the following sums be, and they are hereby, appropriated, out of any money in the Treasury not otherwise appropriated; to supply deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirtieth, eighteen hundred and seventy-six, and for former years, and for other purposes, namely:— Deficiency ap-
propriation.

* * * * *

For topographic and hydrographic survey of the South Pass and bar at the mouth of the Mississippi River, under act of March third eighteen hundred and seventy-five, two thousand and one hundred dollars and twenty-eight cents. Survey of South
Pass.
1875, c. 134.

* * * * *

Approved, May 1, 1876.

CHAP. 123.—An Act Authorizing the residents and property-owners of Neville Township, county of Allegheny, and State of Pennsylvania, to close the channel of the Ohio River on the south side of Neville Island by the construction of an embankment or causeway from the head of said island to the southern shore of said river. June 12, 1876.
Vol. 19, p. 58.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the residents and property-owners of Neville Township, county of Allegheny, and State of Pennsylvania, be, and they are hereby, authorized and empowered to close the channel of the Ohio River on the south side of Neville Island, in said township, by the construction of an embankment or causeway from the head of said island to the southern shore of said river: *Provided, however,* That the Government of the United States shall not be liable for any expenses incurred in the performance of said work, or by reason thereof [a]. Channel of
Ohio River on
south side of
Neville Island
may be closed.

Vol. 32, p. 374.
Post, p. 1009,

Proviso.

Approved, June 12, 1876.

^a Repealed by section 8 of the river and harbor act of June 13, 1902.

July 12, 1876.
Vol. 19, p. 89.

CHAP. 184.—An Act To authorize the Northwestern Improvement Company, a corporation organized under the laws of the State of Wisconsin, to enter upon the Menomonee Indian Reservation, and improve the Oconto River, its branches and tributaries.

Improvement
of Oconto River,
Wis., by North-
western Im-
provement Co.

Damages.

Rights of Me-
nominee In-
dians.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress be, and hereby is, given to the Northwestern Improvement Company, a corporation organized under the laws of the State of Wisconsin, to improve the Oconto River and its branches and tributaries, so as to run logs down said river its branches, and tributaries, across the Menomonee Indian reservation, in accordance with the laws of said State: *Provided, That* any damages which may be caused by such improvement shall be awarded as in all other cases under the laws of the State of Wisconsin, and the amount be paid into the Treasury of the United States for the benefit of said Indians; and said Indians and all other persons shall be permitted to use said river for the purpose of running logs, as contemplated in this act; and the charges for said privileges shall be regulated by the legislature of the State of Wisconsin: *Provided, That* all privileges under this act may be altered or revoked by Congress.

Approved, July 12, 1876.

July 31, 1876.
Vol. 19, p. 102.

CHAP. 246.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and seventy-seven, and for other purposes.

Appropriations
for sundry civil
expenses.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-seven, namely:

* * * * *

River banks at
Fort Brown.

For work necessary for the protection of the river banks at Fort Brown, Texas against the encroachments of the Rio Grande ten thousand dollars or so much thereof as may be necessary, to be expended under the directions of the Secretary of War.

* * * * *

Approved, July 31, 1876.

Aug. 14, 1876.
Vol. 19, p. 132.

CHAP. 267.—An Act Making appropriations for the construction, repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes.

Appropriations
for rivers and
harbors.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not

otherwise appropriated, to be expended, under the direction of the Secretary of War, for the repair, preservation, construction, and completion of the following public works hereinafter named.

For the improvement of the harbor at Dunkirk, New York, eighteen thousand dollars. Dunkirk.

For the improvement of the harbor at Buffalo, New York, eighty-five thousand dollars. Buffalo.

For the improvement of the harbor at Wilson, New York, ten thousand dollars. Wilson.

For the improvement of the harbor at Oak Orchard, New York two thousand dollars. Oak Orchard.

For the improvement of the harbor at Pultneyville, New York three thousand dollars. Pultneyville.

For the improvement of the harbor at Great Sodus Bay, New York, five thousand dollars. Great Sodus Bay.

For removing obstructions in the East River and Hell Gate, New York, two hundred and fifty thousand dollars. Hell Gate.

For the improvement of the natural entrance to Superior Bay, Wisconsin, three thousand dollars. Superior Bay.

For the improvement of the harbor at Du Luth, Minnesota, fifteen thousand dollars. Said appropriation is made upon the express condition that it shall be without prejudice to either party in the suit now pending between the State of Wisconsin, plaintiff, and the city of Du Luth and the Northern Pacific Railroad, defendants. Duluth.

For the improvement of the harbor at Ontonagon, Michigan, fifteen thousand dollars. Ontonagon.

For the improvement of Eagle Harbor, Michigan, twelve thousand dollars. Eagle Harbor.

For the improvement of the harbor at Marquette, Michigan, two thousand dollars. Marquette.

For the improvement of the harbor at Frankfort, Michigan, three thousand dollars. Frankfort.

For the improvement of the harbor at Manistee, Michigan, fourteen thousand dollars. Manistee.

For the improvement of the harbor at Ludington, Michigan ten thousand dollars. Ludington.

For the improvement of the harbor at Pentwater, Michigan, ten thousand dollars. Pentwater.

For the improvement of the harbor at White River, Michigan, five thousand dollars. White River (Lake).

For the improvement of the harbor at Muskegon, Michigan, fifteen thousand dollars. Muskegon.

For the improvement of the harbor at Grand Haven, Michigan, fifteen thousand dollars. Grand Haven.

For the improvement of the harbor at Green Bay, Wisconsin, eight thousand dollars. Green Bay.

For the improvement of the harbor at Menomonee, Wisconsin, eight thousand dollars. Menominee.

For the improvement of the harbor at Ahnapee, Wisconsin, eight thousand dollars. Ahnapee.

- Two Rivers. For the improvement of the harbor at Two Rivers, Wisconsin, five thousand dollars.
- Falls of St. Anthony. For the improvement of the falls of Saint Anthony, Minnesota, one hundred and twenty thousand dollars.
- Minnesota River. For the improvement of Minnesota River, Minnesota, ten thousand dollars.
- Toledo. For the improvement of the harbor at Toledo, Ohio, sixty thousand dollars.
- Sandusky. For the improvement of the harbor at Sandusky City Ohio, twenty-five thousand dollars.
- Vermilion. For the improvement of the harbor at Vermillion, Ohio five thousand dollars.
- Cleveland. For a breakwater at Cleveland Harbor, Ohio, fifty thousand dollars.
- Agreement to be made with Cleveland and Pittsburgh R. R. Co. For repair of east pier at Cleveland, Ohio, eight thousand dollars; and the Secretary of War is hereby authorized to agree with the Pittsburgh and Cleveland Railroad Company for such use and occupancy of said pier as is consistent with the public interests, upon such terms and conditions as he deems reasonable and just; and in case said railroad company shall neglect or refuse to make an agreement satisfactory to the Secretary of War, upon a certificate of that fact to the Attorney-General it shall be the duty of the latter officer to enforce the rights of the United States in the premises by appropriate action.
- Connecticut River. For the improvement of Connecticut River below Hartford Connecticut, twenty thousand dollars.
- Fall River. For the improvement of the harbor at Fall River, Massachusetts, ten thousand dollars.
- New Bedford. For the improvement of the harbor at New Bedford, Massachusetts, ten thousand dollars.
- Penobscot River. For the improvement of Penobscot River, Maine, ten thousand dollars; four thousand dollars of which shall be expended at or near the "Narrows" in said river at Bucksport.
- Cocheco River. For the improvement of Cocheco River, New Hampshire, fourteen thousand dollars.
- Burlington. For the improvement of the harbor at Burlington, Vermont, twenty thousand dollars.
- Swanton. For improvement of the harbor at Swanton, Vermont, two thousand dollars.
- Chester. For the construction of Ice Harbor at Chester, Pennsylvania, two thousand six hundred dollars.
- Passaic River. For the improvement of Passaic River, New Jersey, ten thousand dollars.
- Wilmington. For removing obstructions from, and the improvement of, the harbor at Wilmington, Delaware, sixteen thousand dollars.
- Lewes. For the construction of piers in Delaware Bay near Lewes, Delaware, thirty thousand dollars.
- Chicago. For the improvement of the harbor at Chicago, Illinois, five thousand dollars.
- Des Moines Rapids. For the improvement of the Des Moines Rapids, Mississippi River, two hundred and thirty thousand dollars.

- For the improvement of the harbor at Baltimore, Maryland, seventy-five thousand dollars. Baltimore.
- For the improvement of the Rappahannock River, Virginia, ten thousand dollars. Rappahannock River.
- For the improvement of James River, Virginia, sixty thousand dollars. James River.
- For the improvement of Cape Fear River, North Carolina, one hundred and thirty-two thousand five hundred dollars. Cape Fear River.
- For the improvement of the French Broad River between Brevard and the Buncombe County line, North Carolina, ten thousand dollars. French Broad River.
- For the improvement of Pamlico River, North Carolina, fifteen thousand dollars. Pamlico River.
- For the improvement of the Hiawassee River, Tennessee, ten thousand dollars. Hiawassee River.
- For the improvement of Cumberland River above the city of Nashville, Tennessee, from Nashville to the Kentucky line, fifteen thousand dollars; and thence to the foot of Smith's Shoals, ten thousand dollars; and for Smith's Shoals, twenty-five thousand dollars; and from Smith's Shoals to the Falls of the Cumberland, two thousand dollars. Cumberland River.
- For the improvement of the Great Kanawha River, West Virginia, including the purchase of, and full payment for, sites for dams and locks, between the Great Falls and the Ohio River, not exceeding fifteen thousand dollars, two hundred and seventy thousand dollars. Kanawha River.
- For removal of Beaver and Nailor Bend rocks, and for cleaning out snags and fallen trees in the Little Kanawha, West Virginia, seven thousand and three hundred dollars. Little Kanawha River.
- For the improvement of the harbor at Savannah, Georgia, sixty-two thousand dollars. Savannah.
- For the improvement of the Chattahoochee and Flint Rivers, Georgia, twenty thousand dollars. Chattahoochee and Flint rivers.
- For continuing the work of dredging and removing obstructions to navigation in Cypress Bayou, Texas, thirteen thousand dollars. Cypress Bayou.
- For the improvement at Sabine Pass, and for improvement of Blue Buck Bar and Sabine Bay, and for deepening the channel over the bar at the mouth of the Sabine River, and for deepening of the channel over the bar at the mouth of Neches River, where these rivers enter Sabine Bay, thirty-eight thousand dollars. Sabine Pass, Sabine and Neches rivers.
- For the improvement of Pass Cavallo, inlet to Matagorda Bay, Texas, twenty thousand dollars. Pass Cavallo.
- For the improvement of the Coosa River, Georgia and Alabama between Rome and the Selma, Rome and Dalton Railroad bridge, thirty thousand dollars. Coosa River.
- For the improvement of Ouchita River, Arkansas and Louisiana, twelve thousand dollars. Ouachita River.
- For the improvement of the harbor at Cedar Keys, Florida, ten thousand dollars. Cedar Keys.
- For the improvement of the Lower Willamette and Columbia Rivers from Portland, Oregon, to the sea, twenty thousand dollars. Lower Willamette and Columbia rivers.

Upper Willamette River.	For the improvement of the Upper Willamette River, Oregon, twenty thousand dollars.
Upper Columbia River.	For the improvement of the Upper Columbia, including Snake River, fifteen thousand dollars.
Oakland Harbor.	For the improvement of Oakland Harbor, California, to be applied to finishing training walls and dredging between them, seventy-five thousand dollars.
San Joaquin River.	For the improvement of San Joaquin River, California, twenty thousand dollars.
Delaware River.	For the improvement of the Delaware River below Petty's Island, forty thousand dollars.
Red River.	For removing raft in Red River and closing Tone's Bayou, Louisiana, thirty-five thousand dollars.
Little Sodus Bay.	For the improvement of the harbor at Little Sodus Bay, New York, five thousand dollars.
Schuylkill River.	For the improvement of the Schuylkill River, Pennsylvania twenty thousand dollars.
Bridgeport.	For the improvement of the harbor at Bridgeport, Connecticut, ten thousand dollars.
Southport.	For improvement of the harbor at Southport, Connecticut, five thousand dollars.
Black Lake (Holland).	For the improvement of the harbor at Black Lake, Michigan, fifteen thousand dollars.
Saugatuck.	For the improvement of the harbor at Saugatuck, Michigan, three thousand dollars.
St. Joseph.	For the improvement of the harbor at Saint Joseph's, Michigan, twelve thousand dollars.
Manitowoc.	For the improvement of the harbor at Manitowoc, Wisconsin, eight thousand dollars.
Sheboygan.	For the improvement of the harbor at Sheboygan, Wisconsin, six thousand dollars.
Port Washington.	For the improvement of the harbor at Port Washington, Wisconsin, eight thousand dollars.
Oswego.	For the improvement of the harbor at Oswego, New York, ninety thousand dollars.
Hudson River.	For the improvement of Hudson River, fifty thousand dollars.
Appomattox River.	For the improvement of the Appomattox River, Virginia, thirty thousand dollars.
South Branch, Elizabeth River.	For the improvement of the South Branch of Elizabeth River, Virginia, five thousand dollars.
Nansemond River.	For the improvement of Nansemond River, Virginia, five thousand dollars.
Yazoo River.	For the improvement of the Yazoo River, Mississippi, fifteen thousand dollars.
White River.	For the improvement of White River at Buffalo Shoals, Arkansas, ten thousand dollars.
Perquimans River.	For the improvement of Perquimans River, North Carolina, two thousand five hundred dollars.
Charleston.	For the improvement of the harbor at Charleston, South Carolina, ten thousand dollars.
Etowah River.	For the improvement of the Etowah River, Georgia, ten thousand dollars.

For the improvement of the Ocmulgee River, Georgia, fifteen thousand dollars. Ocmulgee River.

For the improvement of New River from the lead-mines in Wythe County, Virginia, to the mouth of Green-brier River, West Virginia, fifteen thousand dollars. New River.

For the improvement of the harbor at Norfolk, Virginia, thirty-five thousand dollars. Norfolk.

For the improvement of the Warrior and Tombigbee River, Alabama, fifteen thousand dollars. Warrior and Tombigbee rivers.

For the improvement of the Choctawhatchie River, Florida and Alabama, five thousand dollars. Choctawhatchie River.

For continuing the improvement on the outer bar at Galveston, Texas, one hundred and forty-two thousand dollars. Galveston.

For the improvement of the Missouri River above the mouth of the Yellowstone, twenty thousand dollars. Missouri River.

For the improvement of Chester River at Kent Island Narrows, Maryland, five thousand dollars. Chester River.

For the improvement of the Wicomico River^[a], Maryland, five thousand dollars. Wicomico River.

For the improvement of the harbor at Michigan City, Indiana, thirty-five thousand dollars. Michigan City.

For the improvement of the channel of the Mississippi River opposite the city of Saint Louis, Missouri, by the construction of a low dam across the channel east of Arsenal Island, known as Cahokia Chute, and in the revetment of said island, twenty-nine thousand, six hundred dollars. Mississippi River opposite St. Louis, Mo.

For the improvement of the Rush Chute and the harbor of Burlington, Iowa, ten thousand dollars. Burlington.

For the improvement of the harbor at Fort Madison, Iowa, ten thousand dollars. Fort Madison.

For the improvement of the harbor at South Haven, Michigan, ten thousand dollars. South Haven.

For the improvement of Saint Mary's River and Saint Mary's Falls Canal, Michigan, one hundred and thirty thousand dollars. St. Marys River, etc.

For the improvement of the harbor at Cheboygan, Michigan, ten thousand dollars. Cheboygan.

For the improvement of Au Sable River, Michigan, one thousand dollars. Au Sable River.

For the improvement of the Saginaw River Michigan, eleven thousand dollars. Saginaw River.

For the improvement of the harbor at Milwaukee, Wisconsin, twenty-six thousand dollars. Milwaukee.

For the improvement of the harbor at Kenosha, Wisconsin, eight thousand dollars. Kenosha.

For the improvement of the Mississippi River above the Falls of Saint Anthony, twenty thousand dollars; no part of which shall be expended upon the Falls of Saint Anthony. Mississippi River above Falls of St. Anthony.

For the improvement of the harbor at Monroe, Michigan, five thousand dollars. Monroe.

^a On the eastern shore.

Charlevoix.	For the improvement of the harbor at Charlevoix, Michigan, ten thousand dollars.
Thunder Bay (Alpena).	For the improvement of the harbor at Thunder Bay, Michigan, four thousand five hundred dollars.
Ashtabula.	For the improvement of the harbor at Ashtabula, Ohio, five thousand dollars.
Port Clinton.	For the improvement of the harbor at Port Clinton, Ohio, five thousand dollars.
Fairport.	For the improvement of Fairport Harbor, Ohio, five thousand dollars.
Black River (Lorain).	For repair of piers at mouth of Black River, Ohio, six thousand dollars.
Fox and Wisconsin rivers.	For the improvement of the Fox and Wisconsin Rivers, two hundred and seventy thousand dollars.
Erie.	For the improvement of the harbor at Erie, Pennsylvania, forty thousand dollars.
Block Island.	For the improvement of the breakwater at Block Island, Rhode Island, forty thousand dollars.
Boston.	For the improvement of the Boston Harbor, Massachusetts, fifty thousand dollars.
Little Narragansett Bay.	For the improvement of Little Narragansett Bay, Rhode Island and Connecticut, five thousand dollars.
Kennebunk River.	For the improvement of the Kennebunk River, Maine, five thousand dollars.
Belfast.	For the improvement of Belfast Harbor, Maine, five thousand dollars.
Rondout.	For the improvement of the harbor at Rondout, New York, thirty thousand dollars.
Port Jefferson.	For the improvement of the harbor at Port Jefferson, Long Island, New York, six thousand dollars.
Staten Island channel.	For the improvement of the channel between Staten Island and New Jersey, ten thousand dollars.
Provincetown.	For the improvement of the harbor at Provincetown, Massachusetts, four thousand dollars.
Newcastle.	For the construction of piers of Ice Harbor, and removing obstructions at New Castle, Delaware, twelve thousand dollars.
Sand beach (Harbor Beach).	For the improvement of the Harbor of Refuge, Lake Huron, Michigan, including removal of the wreck of the "City of Buffalo," seventy-five thousand dollars.
Chippewa River.	For the improvement of the Chippewa River, Wisconsin, ten thousand dollars.
Wabash River.	For the improvement of the Wabash River, Indiana, seventy thousand dollars.
Calumet.	For the improvement of the harbor at Calumet, Illinois, twenty thousand dollars.
Illinois River.	For the improvement of the Illinois River, Illinois, forty thousand dollars.
Red River of the North.	For the improvement of the Red River of the North, Minnesota, ten thousand dollars.
Upper Mississippi River.	For the improvement of the Upper Mississippi River, thirty thousand dollars; and seven thousand dollars thereof may be applied, if the Secretary of War shall deem it for the public interest, in constructing the necessary machinery

used in Captain Edward Bell's process for building wing-dams, and applying said process in the improvement of said river. Bell's wing dams.

For the improvement of Rock Island Rapids, Mississippi River, twenty-five thousand dollars. Rock Island Rapids.

For the improvement of the Mississippi, Missouri, and Arkansas Rivers, one hundred thousand dollars: *Provided*, That ten thousand dollars thereof shall be expended for removing the bar at Fort Smith, Arkansas: *And provided further*, That forty thousand dollars of the above sum shall be expended on the Missouri River, including improvements opposite Saint Joseph, Missouri, and at Nebraska City. Mississippi, Missouri, and Arkansas rivers.
Proviso.

For the improvement of the Mississippi River between the mouths of the Illinois and Ohio Rivers, (fifteen thousand dollars of which are to be expended between the mouths of the Illinois and Missouri Rivers, and thirty thousand dollars of which are to be expended between the foot of Dickey Island and the mouth of the Ohio River, and five thousand dollars of which are to be expended between islands Number Fourteen and Number Fifteen near the town of Kaskaskia, Illinois,) two hundred thousand dollars. Mississippi River.
How expended.

For removal of a bar in the Mississippi River opposite Dubuque, Iowa, fifteen thousand dollars. Mississippi River opposite Dubuque.

For the improvement of the Ohio River, one hundred and seventy-five thousand dollars. Ohio River.

For the annual expense of gauging the waters of the Lower Mississippi and its tributaries and for continuing observations of the rise and fall of the same, as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars. Lower Mississippi, gauging waters.
Res. 40, Feb. 21, 1871; R. S., § 252, p. 1021.

For the improvement of the Tennessee River, two hundred and seventy thousand dollars; fifteen thousand dollars of which are to be expended above Chattanooga, and the remaining two hundred and fifty-five thousand dollars are to be expended upon Muscle Shoals. Tennessee River.

To ascertain in current and next fiscal years, as required by act of March third, eighteen hundred and seventy-five, the depth of water and width of channel secured and maintained, from time to time, by James B. Eads, at South Pass of the Mississippi River, and to enable the Secretary of War to report during the construction of the work the payments made from time to time and the probable times of other payments, and to report during the construction of the work all important facts relating to the progress of the same, materials used, and the character and permanency with which the said jetty and auxiliary works are being constructed, fifteen thousand dollars. South Pass of Mississippi, depth.
1875, c. 134.

For the construction of a canal around the cascades of the Columbia River in the State of Oregon, ninety thousand dollars; of which amount the Secretary of War is authorized to expend so much as, in his judgment, may be necessary and proper to secure title and right of way for canal and locks, not exceeding the sum of ten thousand dollars; Columbia River canal.

Proviso.

and whenever, in the prosecution of the said work, it shall have become necessary to obtain the right of way over any lands for the said canal and locks, the Secretary of War shall take possession of and use the said lands, after having purchased the same, or, in case the said lands can not be purchased for a reasonable price, then after having paid for the same, or secured the value thereof, which value may be ascertained in the mode provided by the laws of Oregon for the condemnation of lands for public uses in that State. The Department of Justice shall represent the interests of the United States in any legal proceedings under this act to obtain the right of way for said canal.

Racine.

For the improvement of the harbor at Racine, Wisconsin eight thousand dollars.

Galveston Bay.

For the continuing of the work on the ship channel in Galveston Bay, seventy-two thousand dollars; to be expended between Red Fish Bar and Morgan's Point.

Mouth of Mississippi River.
Proviso.

For the improvement of the mouth of the Mississippi River, one hundred thousand dollars: *Provided*, That this appropriation shall not be available whenever and so long as there shall be an open channel of eighteen feet of water, at mean tide, to and from the sea through the South Pass of the Mississippi River to the port of New Orleans.

How appropriations to be applied and expended.

It shall be the duty of the Secretary of War to apply the moneys herein appropriated as far as may be by contract, except when specific estimates can not be made for the particular work, or where, in the judgment of said Secretary, the work can not be contracted at prices advantageous to the Government, and except the appropriations made for examinations and surveys; and such contracts shall be made after sufficient public advertisement for proposals, in such form and manner as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders therefor, accompanied by such securities as the Secretary of War shall require.

Survey of ship channel in Galveston Bay.

SEC. 2. That the Secretary of War is hereby directed to cause a survey for a ship channel through Galveston Bay, beginning at twelve feet water in the mouth of the San Jacinto River and running out of the mouth of said river east of Morgan's Point to the present channel, through Red Fish Bar; thence through the same, extending through Galveston Harbor, passing west of Half-Moon Shoals and Pelican Island, and to twelve feet water in Galveston Channel; and to cause an estimate of the cost of the same to be made and of the comparative merits of the same, with the route to the head of Bolivar Channel; and of the effects of the completion of each of said channels on the Galveston Harbor as to shoaling or deepening the same, and report the same to Congress by the first day of December, eighteen hundred and seventy-six, the cost thereof, not to exceed ten thousand dollars, to be paid out of the forty thousand dollars hereinafter appropriated. And the sum of forty thousand dollars is hereby appropriated for incidental repairs of harbors for which there is no special appropria-

Repairs and surveys.

tion provided for by law, and for examination and survey of such rivers and harbors, as in the judgment of the Secretary of War, will subserve the general interests of commerce.

SEC. 3. That the Secretary of War is hereby directed to report to Congress on the first Monday of December next what legislation, in his opinion, is necessary to protect the breakwaters, piers, and other public works constructed by the United States against trespasses upon or injury thereto; and the Secretary of War is hereby directed to report to Congress at its next session all the instances in the United States in which piers, breakwaters, or other structures or works built or made by the United States in aid of commerce or navigation, are used, occupied, or injured by a corporation or an individual, and the extent and mode of such use, occupation, or injury, and the facts touching the same. Any person who shall wilfully and unlawfully injure any pier, breakwater, or other work of the United States for the improvement of rivers or harbors, or navigation in the United States, shall, on conviction thereof, be punished by a fine not exceeding one thousand dollars.

Reports by Secretary of War of necessary legislation and unlawful use of piers, etc.

Approved, August 14, 1876.

CHAP. 105.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1878, and for other purposes.

Mar. 3, 1877.
Vol. 19, p. 344.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and seventy-eight, namely:

Appropriations, sundry civil expenses.

* * * * *

The requisite amount is hereby appropriated out of any money in the Treasury not otherwise appropriated, to pay all money that may become due and owing to James B. Eades [Eads] and his associates in in accordance with the provisions of the act approved March third eighteen hundred and seventy-five, prior to the first of February, eighteen hundred and seventy-eight.

James B. Eads. South Pass, Mississippi River. 1875, c. 134; 18 Stat., 463.

* * * * *

Approved, March 3, 1877.

[No. 2.] Joint Resolution Relative to reservoirs to promote the navigation of the Mississippi River.

Dec. 15, 1877.
Vol. 20, p. 246.

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, requested to make such preliminary examination of the headwaters of the Saint Croix, Chippewa, and Wisconsin rivers, in the

Reservoirs on St. Croix River, etc., examination for.

States of Minnesota and Wisconsin, as is consistent with his service, to determine the extent and practicability of reservoirs upon the same, and report to this Congress the result of such examination, together with a compilation of all information and reports in his office bearing upon the subject of reservoirs, by February fifteenth proximo, or as early thereafter as practicable. And that he also report the estimated amount and character of the lands which would be submerged by such reservoirs.

Approved, December 15, 1877.

Feb. 7, 1878.
Vol. 20, p. 24.

CHAP. 13.—An Act For the removal of obstructions from the Mississippi, Missouri, Arkansas and Red rivers and for the preservation of the public property.

Removing obstructions from Mississippi and other rivers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of forty thousand dollars be and the same is hereby appropriated out of any money in the Treasury not otherwise appropriated, to be expended under the direction of the War Department, for the removal of snags and other obstructions from the Mississippi, Missouri, and Arkansas Rivers, and for the preservation of the government vessels in that service.

Opening navigation, Red River, La.

SEC. 2. That the sum of six thousand dollars be and the same is hereby appropriated out of any money in the Treasury not otherwise appropriated, to be expended under the direction of the War Department, for the purpose of opening the navigation of Red River above Shreveport in the State of Louisiana, and keeping said navigation open and free from rafts, and for the purpose of preserving the vessels and boats of the United States employed in that work.

To take effect.

SEC. 3. That this act take effect from the date of its passage.

Approved, February 7, 1878.

Apr. 10, 1878.
Vol. 20, p. 36.

CHAP. 58.—An Act To authorize the Secretary of War to prescribe rules and regulations to be observed in the preparation, submission, and opening of bids for contracts under the War Department.

Bids for contracts under War Department.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War is hereby authorized to prescribe rules and regulations to be observed in the preparation and submission and opening of bids for contracts under the War Department; and he may require any bid to be accompanied by a bond in such penal sum as he may deem advisable, with good and sufficient security, conditioned that the bidder will enter into a contract agreeably to the terms of his bid, if the same be awarded to him within sixty

days from the date of the opening of the bids, or otherwise pay the penalty. No bid shall be withdrawn by the bidder within the said period of sixty days.

Approved, April 10, 1878.

CHAP. 75.—An Act To provide for deficiencies in the appropriations for the service of the Government for the fiscal year ending June 30, 1878, and for prior years, for subsistence of the Army, and for other purposes. Apr. 30, 1878.
Vol. 20, p. 41.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated out of any money in the Treasury not otherwise appropriated, for the objects hereinafter expressed, namely:

* * * * *

To pay the current expenses of operating the Des Moines Rapids Canal on the Upper Mississippi River until July first, eighteen hundred and seventy-eight, seven thousand five hundred dollars, or so much thereof as may be necessary, the same to be expended under the direction of the Secretary of War. Des Moines
Rapids Canal.

* * * * *

Approved, April 30, 1878.

CHAP. 161.—An Act Making further appropriations for continuing the improvements of Galveston Harbor, State of Texas. June 7, 1878.
Vol. 20, p. 100.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of seventy-five thousand dollars be, and the same is hereby, appropriated, out of any moneys not otherwise appropriated, for the purpose of continuing the improvements of Galveston Harbor, in the State of Texas; which improvements are now being prosecuted under the direction of the Secretary of War, and the appropriation for which is substantially exhausted; and that the said sum be expended under his direction. Galveston Har-
bor.

Approved, June 7, 1878.

CHAP. 191.—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June 30, 1878, and prior years, and for those heretofore treated as permanent, for re-appropriations and for other purposes. June 14, 1878.
Vol. 20, p. 115.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Balances sur-
plus fund made.
1874, c. 328; 13
Stat., 110.

SEC. 2. That the following balances of appropriations, carried to the surplus fund under the provisions of the fifth section of the act approved June twentieth, eighteen hundred and seventy-four, being required to complete the service of the fiscal year eighteen hundred and seventy-five, and prior years, are hereby continued and rendered available for such purpose, namely:

* * * * *

Surveys of
western, etc., riv-
ers.
1870, c. 292; 16
Stat., 300.

For examination and surveys on western and north-western rivers, there is reappropriated from the balance of fifty thousand dollars appropriated by act of July fifteenth, eighteen hundred and seventy, the sum of three hundred and thirty-four dollars and forty cents.

* * * * *

Alluvial basin,
Mississippi.
1874, c. 411; 18
Stat., 199.

For balance of twenty-five thousand dollars appropriated by act of June twenty-second, eighteen hundred and seventy four, for commission to investigate and report plan for reclamation of alluvial basin of Mississippi River, five thousand dollars.

* * * * *

Approved, June 14, 1878.

June 15, 1878.
Vol. 20, p. 140.

CHAP. 216.—An Act To authorize the Barataria Ship Canal Company to construct and operate a ship-canal from New Orleans to the Gulf of Mexico, through the lands and waters of the United States, and to grant to said company the right of way for that purpose.

Barataria Ship
Canal Co.

Right of way,
etc.

Proviso.

Proviso.

Rates of toll.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Barataria Ship-Canal Company, a body corporate of the State of Louisiana, created by an act of the legislature of said State, approved April twenty-fourth, eighteen hundred and seventy-seven, be, and the same is hereby, granted the right of way through the lands and waters of the United States, to enable said company to construct and operate a ship-canal from a point at or near the city of New Orleans to the Gulf of Mexico, through the Barataria Bay, in the State of Louisiana, with power and authority to construct and maintain all necessary harbors, locks, dams, dikes, levees, and piers: *Provided,* The same shall in no manner interfere with or affect the usual and ordinary navigation of said waters where they are not confined either by piers or canal banks constructed by said company, and necessary for the use and operation of said canal: *And provided further,* That Bayou Villars shall not be closed by said canal company.

SEC. 2. That in the transportation of military or naval stores, troops, or munitions of war of the United States, such rates of toll only shall be charged as may be prescribed by the Secretary of War; and that the tolls or tonnage charges of said company shall not exceed one dollar per ton on the tonnage measurement of any vessel for the

round trip through said canal, or half said sum for less than the round trip; and not exceeding twenty-five cents for each passenger through said canal either way: *Provided*, That vessels of five tons burden and less shall be exempt from tolls for the use of said canal when they do not pass through the locks: *And provided further*, That no tolls shall be charged on any boats or vessels navigating any of the waters on the line of said canal, which could have been navigated by such vessels had such canal not been built.

Provido.

Provido.

Approved, June 15, 1878.

CHAP. 264.—An Act Making appropriations for the construction, repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes.

June 18, 1878.
Vol. 20, p. 152.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended, under the direction of the Secretary of War, for the repair, preservation, construction, and completion of the public works hereinafter named:

For improving Chester River, at Kent Island Narrows, Maryland, three thousand dollars. Chester River.

For improving harbor at Baltimore, Maryland, seventy-five thousand dollars. Baltimore.

For improving Wicomico River^[a], Maryland, five thousand dollars. Wicomico River.

For improving James River, Virginia, seventy thousand dollars. James River.

For improving Appomattox River, Virginia, thirty thousand dollars. Appomattox River.

For improving Great Kanawha River, West Virginia, two hundred and twenty-two thousand dollars. Kanawha River.

For improving New River, from Lead Mines in Wythe County, Virginia, to mouth of Greenbrier River, fifteen thousand dollars. New River.

For improving Cape Fear River, North Carolina, one hundred and sixty thousand dollars. Cape Fear River.

For improving mouth of Occoquan River, Virginia: Completing the improvement, ten thousand dollars. Occoquan Creek.

For improving Aquia Creek, Virginia: Completing the improvement, five thousand dollars. Aquia Creek.

For improving the Rappahannock River, Virginia, thirteen thousand five hundred dollars. Rappahannock River.

For improving South Branch of Elizabeth River, Virginia, five thousand dollars. Elizabeth River.

For continuing construction of ice harbor at New Castle, Delaware, ten thousand dollars. Newcastle.

^a On the eastern shore.

- Norfolk. For improving harbor at Norfolk, Virginia, and its approaches, fifty thousand dollars.
- French Broad River. For improving French Broad River, North Carolina, fifteen thousand dollars.
- Nansemond River. For improving Nansemond River, Virginia: Completing the improvement, two thousand dollars.
- Charleston. For improving harbor at Charleston, South Carolina, two hundred thousand dollars.
- Savannah. For improving harbor at Savannah, Georgia, seventy thousand dollars.
- Cedar Keys. For improving harbor at Cedar Keys, Florida, twenty thousand dollars.
- Apalachicola River. For improving Apalachicola River, Florida, eight thousand dollars.
- Chattahoochee River. For improving Chattahoochee River, Alabama and Georgia, eighteen thousand dollars.
- Alabama River. For improving Alabama River, twenty-five thousand dollars.
- St. Johns River. For deepening the bar at the mouth of Saint John's River, Florida, ten thousand dollars.
- Port Clinton. For Port Clinton, Ohio, ten thousand dollars.
- Flint River. For improving Flint River, Georgia, ten thousand dollars.
- Warrior and Tombigbee rivers. For improving the Warrior and Tombigbee Rivers, Alabama and Mississippi, forty thousand dollars; of which sum twenty-eight thousand dollars shall be expended on the Warrior and Tombigbee and twelve thousand dollars on the Tombigbee above Columbus.
- Galveston Bay, 1876, c. 267; 19 Stat., 138. For improvement of ship channel in Galveston Bay, Texas, between Boliver Channel and Red Fish Bar, seventy-five thousand dollars; and the appropriation made for this work by the act of fourteenth of August, eighteen hundred and seventy-six, is hereby made available for the same part of said channel.
- Mississippi and Arkansas rivers. For improving Mississippi and Arkansas Rivers: Continuing operations, removing snags, and other obstructions, one hundred and eighty thousand dollars; of which sum ten thousand dollars shall be used for removing the bar in the Arkansas River at Fort Smith.
- Missouri River. For the survey of the Missouri River from its mouth to Sioux City, and estimates for the improvement and maintenance of its navigation, fifty thousand dollars.
- Missouri River. For the improvement of the Missouri River: Removal of snags, wrecks, and so forth, seventy thousand dollars.
- Galveston Harbor. For improving entrance to Galveston Harbor, Texas, fifty thousand dollars.
- Sabine Pass. For improving Sabine Pass, Texas, deepening channel at the entrance and at Blue Buck Bar, thirty thousand dollars.
- Pass Cavallo Inlet. For improving Passo Cavallo Inlet into Matagorda Bay, Texas, twenty-five thousand dollars.
- Ouachita River. For improving Ouachita River, Arkansas and Louisiana, ten thousand dollars.
- Yazoo River. For improving Yazoo River, Mississippi, twenty-five thousand dollars.

- For removing raft in Red River and closing Tones Bayou, Louisiana, twenty-four thousand dollars. Red River.
- For improving Cypress Bayou, Texas and Louisiana, fifteen thousand dollars. Cypress Bayou.
- For annual expense of gauging the waters of the Lower Mississippi River and its tributaries: Continuing observations of the rise and fall of the river and its chief tributaries, as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars. Lower Mississippi River.
- For improving White and Saint Francis Rivers, Arkansas, forty thousand dollars. White and St. Francis rivers.
- For improving the Missouri River, opposite or near Saint Joseph, Missouri, fifty thousand dollars. Missouri River.
- For improving mouth of Red River, Louisiana, one hundred and fifty thousand dollars. Red River.
- For removing obstructions in Pocomoke River, Maryland, ten thousand dollars. Pocomoke River.
- For the improvement of the Missouri River at Council Bluffs, Iowa, and Omaha, Nebraska, fifty thousand dollars. Missouri River.
- For improving the Missouri River at Nebraska City, Nebraska, twenty thousand dollars. Missouri River.
- For improvement of L'Anguille River, Arkansas, ten thousand dollars. L'Anguille River.
- For removing bar in Mississippi River, opposite Dubuque, Iowa, ten thousand dollars. Mississippi River.
- For improving Rush Chute and the harbor of Burlington, Iowa, ten thousand dollars. Burlington.
- For improving harbor at Fort Madison, Iowa, eight thousand dollars. Fort Madison.
- For improving Rock Island Rapids, Mississippi River, thirty thousand dollars. Rock Island Rapids.
- For improving Illinois River, seventy-five thousand dollars. Illinois River.
- For the improvement of the Mississippi River, between the mouths of the Ohio and Illinois Rivers, two hundred and forty thousand dollars; of which sum twenty thousand dollars shall be expended between the mouths of the Illinois and Missouri Rivers; seventy-five thousand dollars for constructing dam at Cahokia Chute, opposite Saint Louis, forty thousand dollars between the foot of Dickey's Island and the mouth of the Ohio River; and ten thousand dollars between Islands Numbers Fourteen and Fifteen, near the town of Kaskaskia, Illinois. Mississippi River.
- For removing snags and other obstructions from Red River, Louisiana, twenty-five thousand dollars. Red River.
- For the improvement of the Missouri River above the mouth of the Yellowstone, thirty thousand dollars. Missouri River.
- For the improvement of the Mississippi River: Widening and deepening the channel from Saint Paul to Des Moines Rapids, two hundred and fifty thousand dollars. Mississippi River.
- For widening and deepening the channel of the Mississippi River from Des Moines Rapids to the mouth of the Ohio, one hundred thousand dollars. Mississippi River.

- Mobile Harbor.** For the improvement of Mobile Harbor, ten thousand dollars, to be applied to making tests, surveys, and borings to determine whether the ship-channel now leading from the lower anchorage in Mobile Bay can be deepened so as to admit vessels drawing twenty-two feet, or any less draught above thirteen feet, to the wharves at the city of Mobile.
- Cumberland River.** For the improvement of Cumberland River above Nashville, Tennessee, sixty thousand dollars; of which sum twenty thousand dollars shall be expended between Nashville and the Kentucky line; thence to the foot of Smith's Shoals, eight thousand dollars; and for Smith's Shoals, thirty thousand dollars; thence to the falls of the Cumberland, two thousand dollars.
- Minnesota River.** For improving Minnesota River, ten thousand dollars.
- Red River.** For improving Red River of the North, Minnesota, thirty thousand dollars.
- Tennessee River.** For improving Tennessee River: Continuing operations above Chattanooga, fifteen thousand dollars; continuing operations below Chattanooga, including Muscle Shoals, three hundred thousand dollars; fifteen thousand dollars of which sum, or so much thereof as may be necessary, to be expended in the improvement of Duck River Shoals, on Tennessee River.
- Cumberland River.** For improving Cumberland River, below Nashville, Tennessee, forty-five thousand dollars.
- Coosa River.** For improving Coosa River, between Rome, Georgia, and the Selma, Rome and Dalton Railroad bridge, Alabama, seventy-five thousand dollars.
- Hiwassee River.** For improving Hiwassee River, Tennessee, ten thousand dollars.
- Ocmulgee River.** For improving Ocmulgee River, Georgia, fifteen thousand dollars.
- Oostenaula and Coosawattee rivers.** For improving Oostenaula and Coosawattee Rivers, Georgia, four thousand dollars.
- Little Kanawha River.** For improving Little Kanawha River, West Virginia, eighteen thousand dollars.
- Wabash River.** For improving Wabash River, Indiana, fifty thousand dollars.
- Superior Bay.** For dredging Superior Bay, Wisconsin: Improving natural entrance to Superior Bay, three thousand dollars; continuing improvement of the harbor of Duluth, thirty thousand dollars.
- Ontonagon.** For improving harbor at Ontonagon, Michigan, fifteen thousand dollars.
- Eagle Harbor.** For improving Eagle Harbor, Michigan, eight thousand dollars.
- Marquette.** For improving harbor at Marquette, Michigan, two thousand dollars.
- Menominee.** For improving harbor at Menomonee, Wisconsin, ten thousand dollars.
- Green Bay.** For improving harbor at Green Bay, Wisconsin, five thousand dollars.

- For improving harbor of refuge, entrance at Sturgeon Bay Canal, thirty thousand dollars. Sturgeon Bay.
- For improving harbor at Ahnapee, Wisconsin, eight thousand dollars. Ahnapee.
- For improving harbor at Two Rivers, Wisconsin, ten thousand dollars. Two Rivers.
- For improving harbor at Manitowoc, Wisconsin, fifteen thousand dollars. Manitowoc.
- For improving harbor at Sheboygan, Wisconsin, four thousand dollars. Sheboygan.
- For improving harbor at Port Washington, Wisconsin, five thousand dollars. Port Washington.
- For improving the Mississippi River from the bridge of the Chicago, Milwaukee and Saint Paul Railroad Company above La Crosse, Wisconsin, to the mouth of Root River, below said city, twelve thousand five hundred dollars. Mississippi River.
- For improving and deepening the channel of the Ohio River, including the removal of snags, wrecks, and so forth, from Pittsburgh to its mouth, three hundred thousand dollars; of which sum fifty thousand dollars shall be expended at Grand Chain for removal of obstructions and deepening the channel at that point. Ohio River.
- For the construction of a harbor or harbors of refuge at or near Cincinnati, to protect the commerce of the Ohio River from flocs of ice, fifty thousand dollars, to be expended under the direction and control of the Engineer Corps of the Army. Cincinnati.
- For improvement of the harbor at New Orleans, Louisiana, including cost of surveys and estimates fifty thousand dollars. New Orleans.
- For the improvement of Monongahela River, West Virginia and Pennsylvania, to be expended in completing lock and dam at Hoard's Rocks, twenty-five thousand dollars. Monongahela River.
- For the improvement of harbor at Michigan City, Indiana, seventy-five thousand dollars; of which sum twenty-five thousand dollars shall be expended for the improvement of the inner harbor. Michigan City.
- For the improvement of Gut^a opposite Bath, Maine, seventeen thousand dollars. Bath.
- For the improvement of Waddington Harbor, New York, five thousand dollars. Waddington Harbor.
- For the improvement of Oakland Harbor, California, eighty thousand dollars; but this sum shall not be available until the right of the United States to the bed of the estuary and training-walls of this work is secured, free of expense to the Government, in a manner satisfactory to the Secretary of War. Oakland Harbor.
- For improving harbor at Milwaukee, Wisconsin; fifteen thousand dollars. Milwaukee.
- For improving harbor at Racine, Wisconsin, ten thousand dollars. Racine.

^a The Gut is a part of the Sasanoa (or Back) River.

Kenosha.	For improving harbor at Kenosha, Wisconsin, eight thousand dollars.
Brazos Santiago.	For removing wrecks and other obstructions to navigation at Brazos Santiago, Texas, six thousand dollars.
Fox and Wisconsin rivers.	For improving Fox and Wisconsin Rivers, two hundred and fifty thousand dollars.
Chicago.	For improving harbor at Chicago, Illinois: Extending breakwater and dredging channel, seventy-five thousand dollars.
Calumet.	For improving harbor at Calumet, Illinois, fifteen thousand dollars.
Charlevoix.	For improving harbor at Charlevoix, Michigan, twelve thousand dollars.
Frankfort.	For improving harbor at Frankfort, Michigan, eight thousand eight hundred dollars.
Manistee.	For improving harbor at Manistee, Michigan, fifteen thousand dollars.
Ludington.	For improving harbor at Ludington, Michigan, fifteen thousand dollars.
Pentwater.	For improving harbor at Pentwater, Michigan, ten thousand dollars.
White River (Lake).	For improving harbor at White River, Michigan, twelve thousand dollars.
Grand Haven.	For improving harbor at Grand Haven, Michigan, fifteen thousand dollars.
Black Lake (Holland).	For improving harbor at Black Lake, Michigan, ten thousand dollars.
Saugatuck.	For improving harbor at Saugatuck, Michigan, two thousand five hundred dollars.
Bayou La Fourche.	For removing obstructions in Bayou La Fourches, Louisiana, ten thousand dollars.
South Haven.	For improving harbor at South Haven, Michigan, twelve thousand dollars.
St. Joseph.	For improving harbor at Saint Joseph, Michigan, twelve thousand dollars.
St. Marys River, etc.	For improving Saint Mary's River and Saint Mary's Falls Canal, Michigan, one hundred and seventy-five thousand dollars.
Sand beach (Harbor Beach).	For improving Harbor of Refuge, Lake Huron, Michigan, one hundred thousand dollars.
St. Clair River.	For improving Saint Clair River at mouth of Black River, Michigan, one thousand five hundred dollars.
Detroit River.	For improving Detroit River, Michigan, one hundred thousand dollars.
St. Clair flats.	For improving Saint Clair Flats, Michigan, five thousand dollars.
Saginaw River.	For improving Saginaw River, Michigan, twenty-five thousand dollars.
Cheboygan.	For improving harbor at Cheboygan, Michigan, eight thousand dollars.
Monroe.	For improving harbor at Monroe, Michigan, two thousand five hundred dollars.
Toledo.	For improving harbor at Toledo, Ohio, fifty thousand dollars.

For the improvement of Guyandotte River, West Virginia, two thousand dollars. Guyandot River.

For the improvement of the Raritan River, New Jersey, two hundred thousand dollars. Raritan River.

For the improvement of Blackwater River, Virginia, five thousand dollars. Blackwater River.

For the improvement of Hampton River, Virginia, ten thousand dollars. Hampton River.

For the improvement of Chickahominy River, Virginia, five thousand dollars. Chickahominy River.

For the improvement of the Narrows above Orange, on the Sabine River, Texas, and deepening the channel at the mouth of said river, ten thousand dollars. Sabine River.

For deepening the channel at the mouth of the Trinity River, Texas, and removing obstructions to Liberty, ten thousand dollars. Trinity River.

For deepening the channel at the mouth of the Neches River, Texas, and removing obstructions to Beaumont, eight thousand dollars. Neches River

For improving Pascagoula River, Mississippi, and deepening the channel at its mouth, ten thousand dollars. Pascagoula River.

For the improvement of the harbor and the Mississippi River at Memphis, Tennessee, forty-six thousand dollars. Memphis.

For the improvement of Elk River, West Virginia, five thousand dollars. Elk River.

For improving harbor at Sandusky City, Ohio, twenty thousand dollars. Sandusky.

For improving harbor at Huron, Ohio, one thousand dollars. Huron.

For improving harbor at Vermillion, Ohio, four thousand dollars. Vermillion.

For breakwater at Cleveland, Ohio, and repairs of harbor, one hundred thousand dollars. Cleveland.

For improving harbor at Fairport, mouth of Grand River, Ohio, five thousand dollars. Fairport.

For improving harbor at Ashtabula, Ohio, twelve thousand dollars. Ashtabula.

For improving harbor at Erie, Pennsylvania, twenty-five thousand dollars. Erie.

For improving harbor at Buffalo, New York, eighty thousand dollars. Buffalo.

For improving harbor at Oak Orchard, New York, two thousand dollars. Oak Orchard.

For improving harbor at Charlotte, New York, one thousand dollars. Charlotte.

For improving harbor at Pultneyville, New York, five thousand dollars. Pultneyville.

For improving harbor at Great Sodus Bay, New York, five thousand dollars. Great Sodus Bay.

For improving harbor at Little Sodus Bay, New York, ten thousand dollars. Little Sodus Bay.

For improving harbor at Oswego, New York, ninety thousand dollars. Oswego.

- Wilmington. For breakwater at Wilmington, California, twenty thousand dollars.
- Sacramento and Feather rivers. For improving Sacramento and Feather Rivers, California, fifteen thousand dollars.
- Lower Willamette and Columbia rivers. For improving Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea, thirty thousand dollars.
- Upper Willamette River. For improving Upper Willamette River, Oregon, twenty thousand dollars.
- Upper Columbia River. For improving Upper Columbia River, including Snake River, twenty thousand dollars.
- Cascades, Columbia River. For constructing a canal around the Cascades of Columbia River, one hundred and fifty thousand dollars.
- Big Sandy River. For the improvement of Big Sandy River, from Catlettsburg, Kentucky, to the head of navigation, twelve thousand dollars.
- Columbia River. For the improvement of the mouth of the Columbia River, Oregon, five thousand dollars, the same or so much thereof as may be necessary to be expended under the direction of the Secretary of War in making a thorough survey of the bar at the mouth of said river and in the preparation of a plan and estimates for its permanent improvement; any balance to be used in the temporary improvement of said bar.
- Chester. For repairs of ice-harbor at Chester, Pennsylvania, three thousand four hundred dollars.
- Oconee River. For the improvement of the Oconee River, Georgia, ten thousand dollars; of which sum eight thousand dollars shall be expended between Dublin and the Central Railroad bridge, and two thousand dollars between Dublin and the Ocmulgee River.
- Galena River. For the improvement of Galena River, Illinois, making a channel of one hundred feet width, and the improvement, of the harbor of Galena, thirty thousand dollars.
- Vicksburg. For the improvement of the Mississippi River at and near Vicksburg, Mississippi, and protection of harbor at Vicksburg, Mississippi eighty-four thousand dollars.
- Salem River. For improving the channel of Salem River, New Jersey, and removing obstructions in the Delaware River at the mouth of Salem River, three thousand dollars.
- Missouri River. For improving the Missouri River at Omaha City, Nebraska, thirty thousand dollars.
- St. Croix River. For the improvement of the Saint Croix River, Wisconsin, ten thousand dollars.
- Chippewa River. For completing and protecting wing dams and jetties now in course of construction upon the Chippewa River in Wisconsin in and near its mouth and below the lower point of Beef Island, ten thousand dollars: *Provided*, That nothing herein shall be construed, nor shall any expenditure of this appropriation be made so as to affect existing legal or equitable rights in or upon the said Chippewa River or its branches, whether such rights arise under the laws of the United States or the State of Wisconsin.
- Missouri River. For the improvement of the Missouri River at Atchison, Kansas, twenty thousand dollars.

- For the improvement of the Missouri River at Eastport, Iowa, and Nebraska City, Nebraska, twenty thousand dollars. Missouri River.
- For the improvement of the Osage River in Missouri and Kansas, twenty thousand dollars. Osage River.
- For the improvement of the Missouri River at or near Fort Leavenworth, Kansas, twenty-five thousand dollars. Missouri River.
- For improving the Missouri River at Sioux City, Iowa, twelve thousand five hundred dollars. Missouri River.
- For the improvement of the Neuse River, North Carolina, forty thousand dollars. Neuse River.
- For the improvement of the harbor, including survey and estimate for removal of wrecks at Pensacola, Florida, twenty thousand dollars. Pensacola.
- For the improvement of Currituck Sound and North River Bar, North Carolina, twenty thousand dollars. Currituck Sound.
- For the improvement of Scuppernong River, North Carolina, two thousand dollars. Scuppernong River.
- For the improvement of Edenton Harbor, North Carolina, four thousand dollars. Edenton Harbor.
- For completing the improvement of Black River Harbor, Ohio, one thousand dollars. Black River (Lorain).
- For the improvement of the harbor at New Haven, Connecticut, twenty-five thousand dollars. New Haven.
- For the improvement of the harbor at Darien, Georgia, eight thousand dollars. Darien.
- For continuing the improvement of Penobscot River, Maine, twelve thousand dollars; of which sum two thousand five hundred dollars, or so much thereof as may be necessary, shall be expended at or near the Narrows in said river at Bucksport. Penobscot River.
- For the improvement of the harbor at Bridgeport, Connecticut, ten thousand dollars; of which sum not less than one-half shall be expended between the lower bridge and the horse-railroad bridge. Bridgeport.
- For the improvement of Harlem River, New York, three hundred thousand dollars; but this sum is not to be available until the right of way for this work is secured to the United States free of cost. Harlem River.
- For improving harbor at Belfast, Maine, twelve thousand dollars. Belfast.
- For improving Richmond Island Harbor, Maine, six thousand dollars. Richmond Island Harbor.
- For improving Cocheco River, New Hampshire, six thousand dollars. Cocheco River.
- For improving Merrimac River, Massachusetts, below Mitchell's Falls, ten thousand dollars. Merrimac River.
- For improving harbor at Boston, Massachusetts, fifty-five thousand dollars. Boston.
- For improving harbor at Plymouth, Massachusetts, five thousand dollars. Plymouth.
- For improving harbor at Provincetown, Massachusetts, one thousand dollars. Provincetown.

Hyannis.	For improving harbor at Hyannis, Massachusetts, three thousand dollars.
Taunton River.	For improving Taunton River, Massachusetts, two thousand dollars.
Providence River.	For improving Providence River, Rhode Island; Removing Bulkhead Rock, five thousand dollars.
Little Narragansett Bay.	For improving Little Narragansett Bay, Rhode Island and Connecticut, ten thousand dollars.
Providence River.	For improving Providence River and Narragansett Bay, fifty thousand dollars.
Echo Harbor.	For the improvement of Echo Harbor, New Rochelle, New York, ten thousand dollars.
Staten Island Sound.	For the improvement of Staten Island Sound, between New Jersey and Staten Island, fifteen thousand dollars ^a].
Breton Bay.	For improving the harbor of Breton Bay, Leonardtown, Maryland, five thousand dollars.
Cambridge.	For improving the inner harbor at Cambridge, Maryland, five thousand dollars.
Washington and Georgetown.	For improving the harbors and channels at Washington and Georgetown, District of Columbia, fifty thousand dollars; of which sum twenty thousand dollars is to be expended in Washington harbor and channel below the Long Bridge, and thirty thousand dollars to be expended in Georgetown harbor and channel.
Connecticut River.	For improving Connecticut River, below Hartford, Connecticut, thirty thousand dollars; of which sum five thousand dollars shall be used for dredging the river between Hartford and Middletown, and two thousand dollars for improving the mouth of Salmon River in the town of East Haddam.
Stonington.	For improving harbor at Stonington, Connecticut, forty thousand dollars.
Thames River.	For improving Thames River, Connecticut, ten thousand dollars.
Milford.	For improving harbor at Milford Connecticut, ten thousand dollars.
Housatonic River.	For improving Housatonic River, Connecticut, five thousand dollars.
Norwalk.	For improving harbor at Norwalk, Connecticut, six thousand dollars.
Port Jefferson.	For improving harbor at Port Jefferson, Long Island Sound, New York, eight thousand dollars.
Hudson River.	For improving Hudson River, New York, seventy thousand dollars.
Hell Gate.	For removing obstructions in East River and Hell Gate, New York, three hundred and fifty thousand dollars.
Passaic River.	For improving Passaic River, New Jersey, ten thousand dollars.

^a This appropriation was expended upon the work of improving the channel between "Staten Island and New Jersey." "Staten Island Sound" is another name for Arthur Kill, one of the waterways included in the adopted project, the others being Kill van Kull and the lower part of Newark Bay.

For improving East Chester Creek, New York, ten thousand dollars. East Chester Creek.

For improving harbor at Rondout, New York, thirty thousand dollars. Rondout.

For improving harbor at Burlington, Vermont, twenty thousand dollars. Burlington.

For improving harbor at Swanton, Vermont, twenty thousand dollars. Swanton.

For improving Otter Creek, Vermont, eight thousand dollars. Otter Creek.

For constructing piers in Delaware Bay, near Lewes, Delaware, twenty thousand dollars. Lewes.

For improving harbor at Wilmington, Delaware, seven thousand dollars. Wilmington.

For improving Schuylkill River, Pennsylvania, thirty thousand dollars. Schuylkill River.

For improving Delaware River, below Bridesburg, one hundred thousand dollars. Delaware River.

For improving Delaware River, between Trenton and White Hill, New Jersey, ten thousand dollars. Delaware River.

For improving north and south branches of Shrewsbury River, New Jersey, eighteen thousand dollars. Shrewsbury River.

For improving Cohansey Creek, New Jersey, five thousand dollars. Cohansey Creek.

For improving Des Moines Rapids, and operating the canal, ninety-five thousand dollars. Des Moines Rapids.

For improving Upper Mississippi River, from the mouth of the Illinois: Removal of snags and obstructions, forty-one thousand five hundred dollars. Upper Mississippi River.

For continuing surveys and examinations at the South Pass of the Mississippi River, fifteen thousand dollars. South Pass.

It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements, other than surveys and estimates, in carrying on the various works by contract or by hired labor, at his discretion, and as in his judgment may be most advantageous to the government; and, where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders therefor, accompanied by such securities as the Secretary of War shall require. Use and expenditures of appropriations.

SEC. 2. That the Secretary of War is hereby directed at his discretion to cause examinations or surveys, or both, and estimates of cost of improvements proper to be made at the following points, namely: Surveys and examinations.

Portsmouth Harbor, New Hampshire;

For improving the navigation at the Falls on Red River near Alexandria, Louisiana; Portsmouth.
Red River Falls.

The Missillion Creek, Delaware;

Cape Foulweather, Oregon, to ascertain its adaptability as a harbor of refuge; Missillion.
Cape Foulweather.

The entrance of Coos Bay. Coos Bay.

Conecuh, etc., rivers.	The Conecuh, Patsaligo, and Escambia Rivers, Alabama;
Yadkin River.	The Yadkin, North Carolina, between the bridge on the North Carolina Railroad and Wilkesborough;
Flushing Bay.	Flushing Bay, New York;
Thames River.	The Thames River, Connecticut;
Big Sunflower, etc., rivers.	The Big Sunflower, Chickasahoy, Tallahatchie, Cold Water, Pearl, and Pascagoula, Mississippi; and the expenses of survey of the Pascagoula shall be defrayed out of the sum herein appropriated for the improvement thereof;
North Landing.	North Landing River, Virginia;
Onancock Harbor.	Onancock [Onancock] Harbor, Virginia;
Salem River.	The Salem River, New Jersey, between Sharpstown and Delaware Canal;
Suwanee.	The Suwannee River, Florida;
Caloosahatchee.	The Caloosahatchie River, Florida;
Mississippi River.	Mississippi River at and above the city of Alexandria, Missouri;
Hillsboro River.	The mouth of Hillsborough River and Tampa Bay, Florida;
Caney Fork and Obey rivers.	Caney's Fork and Obey's Rivers, Tennessee;
Bayou Bartholomew.	Bayou Bartholomew, Arkansas;
Upper Red River.	Upper Red River, from the raft up to the Missouri, Kansas and Texas Railroad Bridge; and also the Brazos River in Texas from eight miles above its mouth, down through its mouth to the outer edge of the bar in the Gulf of Mexico.
Brazos River.	
Aransas Pass.	Aransas Pass and Bay, up to Rockport and Corpus Christi, Texas; and Corpus Christi Pass and Channel;
Little River.	Little River, Arkansas;
Saline River.	Saline River ^a , Arkansas;
Brazos River.	The bar at the mouth of Brazos River, Texas, including a report upon the capacity of the harbor at the mouth of the Brazos, and its adaptability as a harbor of refuge and naval station;
Missouri River.	The Missouri River at Cedar City, in Callaway County, Missouri;
	Missouri River at the city of St. Charles, Missouri;
Yellowstone.	Yellow Stone River;
Nottoway.	The Nottoway River, Virginia;
Long Island coast.	The coast of Long Island, New York, between Coney Island Point and Rockaway Inlet, in New York Bay;
Sheepshead Bay.	Sheepshead Bay, New York;
Canarsie Bay.	Canarsie Bay, New York;
Chattahoochee.	The Chattahoochee River, Georgia, above Columbus;
Flint River.	The Flint River, Georgia, from Albany to Montezuma;
Etowah River.	The Etowah River, Georgia;
Savannah River.	The Savannah River, above Augusta, Georgia;
Fourche Le Fevre River.	The Fonche La Fave [Fourche Le Fevre River] in Arkansas;
San Luis Obispo.	The harbor of San Luis Obispo, California, with a view to the practicability of building breakwater;

^a A tributary of Ouachita River.

The harbor of San Buenaventura, California, with a view to the practicability of building breakwater;	San Buenaventura.
The harbor of Santa Barbara, California, with a view to the practicability of building breakwater;	Santa Barbara.
The Mississippi River, to ascertain the practicability, cost, and utility of a dike from Bloody Island, opposite the city of Saint Louis, Missouri, north to the dike or dam opposite Brooklyn, on the Illinois shore;	St. Louis dike.
A survey and estimate of the damages, if any, done, or to be done, to riparian owners of lands, and improvements thereon, at or in front of the town of Venice, Illinois, near Saint Louis, Missouri, by reason of government improvements made, or to be made, at or near said town of Venice;	Damages at Venice.
Dan River, Virginia, from Clarksville, via Danville, Virginia, to Danbury, North Carolina;	Dan River.
Staunton River, from Roanoke Depot, in Charlotte County, Virginia, to Brookneal, in the county of Campbell, Virginia;	Staunton River.
New River, from the Lead Mines in Wythe County to the mouth of Wilson in Grayson County, Virginia;	New River.
The harbor at Quincy, Illinois;	Quincy.
Tones Bayou, Bayous Pierre and Wincey and Lakes Bayou Pierre and Cannasanier, Louisiana;	Tones Bayou, etc.
Scituate Harbor, Massachusetts, with a view to its adaptability as a harbor of refuge;	Scituate.
Tongapahoe River, Louisiana;	Tangipahoa.
Wolf River ^[a] , from Lake Boygan [Poygan] to Red River, Wisconsin;	Wolf River.
The Arkansas River, from Fort Smith, Arkansas, to the mouth of Little Arkansas;	Arkansas River.
Woodbridge Creek, Middlesex County, New Jersey;	Woodbridge.
Elizabeth River, New Jersey;	Elizabeth River.
Rahway River, New Jersey;	Rahway River.
Charles River, Massachusetts, to the head of tide-water;	Charles River.
Manasquan River, New Jersey;	Manasquan.
White River, Indiana, including the East Fork to the new bridge in course of construction near Bedford, and the West Fork to the town of Gosport;	White River.
Portage Lake, Manistee County, Michigan, with a view to its adaptability as a harbor of refuge;	Portage Lake
Westport Harbor, Massachusetts;	Westport.
Wood's Holl, Massachusetts;	Woods Hole.
Peedee ^[b] River, from Cheraw, South Carolina, to the mouth of Uwharic River, North Carolina;	Great Peedee River.
The bars at the entrance of Annapolis Harbor, Maryland, with a view to accommodation of deep-draught vessels at low tide;	Annapolis.
West Branch of the Patapsco River, Maryland, from Lightstreet bridge to head of tide-water, and an estimate of the cost of making the same navigable for canal-boats;	Patapsco River, West Branch.

^a A tributary of Fox River.^b Known also as Great Peedee River.

Kentucky River.	The Kentucky River and navigable tributaries, Kentucky;
Licking River.	The Licking River, Kentucky;
Cumberland Falls.	The falls of the Cumberland, Kentucky;
Clearwater.	Clearwater River, Idaho;
Missouri and Kansas rivers.	The Missouri and Kansas Rivers, at and near their junction;
Trent River.	The Trent River, North Carolina;
Neuse River.	Neuse River, from Smithfield to Goldsborough, North Carolina;
Chowan River.	Chowan River, North Carolina;
Tar River.	The Tar River, North Carolina, from Washington to Tarborough;
Humboldt Bay.	Humboldt River [Bay], California, with a view to its adaptability as a harbor of refuge;
Crescent City Harbor.	Crescent City Harbor, California, with a view to its adaptability as a harbor of refuge;
Reservoirs on Mississippi, St. Croix, Chippewa, and Wisconsin rivers.	The examination of the sources of the Mississippi River and of the Saint Croix River in Wisconsin and Minnesota, and of the Chippewa and Wisconsin Rivers in the State of Wisconsin, to determine the practicability and cost of creating and maintaining reservoirs upon the headwaters of said rivers and their tributaries for the purpose of regulating the volume of water and improving the navigation of said rivers, and that of the Mississippi River, and an estimate of the damage to result therefrom to property of any kind;
Muskingum River.	The Muskingum River, Ohio, below the second dam, to ascertain its adaptability for an ice-harbor, for the protection of steamers and other craft on the Ohio River;
Colorado of the West.	Colorado of the West from Fort Yuma to El Dorado Canon;
Kiskiminitas and Conemaugh rivers.	The Kiskiminetas and Conemaugh Rivers, Pennsylvania, from the mouth of the Kiskiminetas to the mouth of Stony Creek on the Conemaugh;
Allegheny River.	The Allegheny River, up to the mouth of French Creek;
Kankakee River.	The Kankakee River, Illinois, and Indiana;
Lincolntonville.	Lincolntonville Harbor, Maine;
Lubec Channel.	Lubec Channel, Maine;
Apalachicola.	Apalachicola Bay, Florida;
East River.	East River; New York, at its junction with Newtown Creek;
Maryland and Delaware Peninsula Canal.	The peninsula of Maryland and Delaware, with a view to a construction of a ship-canal to connect the waters of the Delaware and Chesapeake Bays;
Florida Peninsula Canal.	The peninsulas of Florida with a view to the construction of a ship canal from the Saint Mary's River to the Gulf of Mexico;
Smyrna River.	Duck Creek [Smyrna River], Delaware;
St. Johns River.	The mouth of Saint John's River, Florida;
Kansas River.	The Kansas River from its mouth to Junction City, Kansas;
Delaware River.	The Delaware River below League Island;

For survey of the Saint John's River, Florida, between Lake George and Lake Monroe, and estimates of cost of deepening the Volusia Bar and straightening the river by cut-offs;

St. Johns River.

Port Orford, Oregon, to ascertain its adaptability for a harbor of refuge;

Port Orford.

Rogue River, Oregon, between Scottsburg and its mouth;

Rogue River.

Coquille River, Oregon;

Coquille River.

Alsea River and Bay, Oregon;

Alsea River and Bay.

That the sum of twenty thousand dollars is hereby appropriated, out of any moneys in the Treasury not otherwise provided for, for the purpose of having a complete survey and examination of all the water lines and routes leading or that may lead from the Harbor of Norfolk to the Atlantic Ocean south of Hatteras, including any communication that may be practicable with the Cape Fear River; and the said examination and survey shall embrace the line known as the Dismal Swamp line and the line known as the Albermarle[sic] and Chesapeake Canal line, and all other routes and lines that may be practicable in the waters of Eastern North Carolina connecting Norfolk Harbor by inland navigation with the ocean south of Cape Hatteras.

Water lines from Norfolk to Cape Fear River.

What lines to be surveyed.

SEC. 3. That for the examinations and surveys herein provided for, and for incidental repairs of harbors for which there is no special appropriation, the sum of one hundred and fifty thousand dollars is hereby appropriated, to be paid out of any moneys in the Treasury not otherwise appropriated.

Examinations, etc., appropriation.

Approved, June 18, 1878.

CHAP. 313.—An Act To amend an act entitled "An Act making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes," approved March third, anno Domini eighteen hundred and seventy-five.

June 19, 1878.
Vol. 20, p. 168.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the fourth and succeeding sections of an act entitled "An act making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes", approved March third, anno Domini eighteen hundred and seventy-five authorizing James B. Eads and his associates to create and permanently maintain a wide and deep channel between the South Pass of the Mississippi River and the Gulf of Mexico, be, and they are hereby, amended so as to provide that payments shall be made to said Eads, his assigns or legal representatives, as follows, namely:

James B. Eads. Payments to, how to be made. 1875, c. 134; 18 Stat., 468; 1879, c. 181.

Amended.

SEC 2 The Secretary of War is hereby authorized and directed to draw his warrant upon the Secretary of the Treasury of the United States in favor of James B Eads, his assigns or legal representatives, for the sum of five hundred thousand dollars, so soon as the said Eads, his

Payment of \$500,000.

lawful assigns or legal representatives, shall file with the said Secretary of War a relinquishment of all claim to the payment of five hundred thousand dollars provided by the hereinbefore recited act to be paid when a channel twenty-four feet in depth and not less than two hundred and fifty feet in width shall have been obtained. And the Secretary of the Treasury is hereby authorized and directed to pay to said Eads, his lawful assigns or legal representatives, the sum for which said warrant is drawn.

Monthly payments, amounting to \$500,000.

SEC 3 The Secretary of War is further hereby authorized and directed upon his approval of the engineers statement in this section mentioned to draw his warrant upon the Secretary of the Treasury of the United States in favor of said James B. Eads, his lawful assigns or legal representatives, monthly, for such sums, not exceeding in the aggregate the gross sum of five hundred thousand dollars, as he or they may require in the prosecution of the works authorized by said hereinbefore recited act, to pay for materials furnished, labor done, and expenditures incurred, from and after the passage of this act, in the construction

Certificates of work, etc.

of said works: *Provided*, That said Eads or his legal representatives, shall file in the office of the Secretary of War, with each requisition made by him or them, a certified statement, which shall be made by the engineer officer provided for in said act, that the requisition is for the amount of work properly done, materials furnished, and expenditures incurred in the prosecution of the work: *And provided*, That said Eads, his lawful assigns or legal representatives shall file with the Secretary of War a relinquishment of all claim to the deferred payment of two hundred and fifty thousand dollars provided by the hereinbefore recited act to be paid when a channel twenty-four feet in depth and not less than two hundred and fifty feet in width shall have been maintained for twelve months consecutively:

Relinquishment of deferred payment.

Further relinquishment.

And provided further, That said Eads, his lawful assigns or legal representatives shall from time to time, as monthly installments of the remaining two hundred and fifty thousand dollars are paid, file with the Secretary of War a relinquishment of like amounts, to be deducted from the payment of five hundred thousand dollars provided by the hereinbefore recited act to be paid when a channel twenty-six feet in depth and not less than three hundred feet in width shall have been obtained. And the Secretary of the Treasury is hereby authorized and directed to pay to said Eads, his lawful assigns or legal representatives, the sums for which said warrants are drawn. All other payments to said James B Eads his lawful assigns or legal representatives are to be made under and in pursuance of the provisions of the hereinbefore recited act; the whole of said act, except as the same is hereby expressly modified or amended, to have the same force and effect as if this act had not been passed.

Remaining payments according to former act.

Board of Engineers to examine and report.

SEC. 4 The President of the United States is hereby authorized and directed to convene a board of five engi-

neers of the Army, which said board shall visit the works in process of construction by said James B. Eads at the South Pass of the Mississippi River, and make an examination of the same, and make a full report of the progress made in the construction of the works, the probable cost of their completion, and the results produced, or that may properly be produced by them, their probable permanency, and of the advisability of any modification of the terms of the act under which said Eads is constructing said works, so far as regards dimensions of channel through the jetties, and of the terms of payment for the same; which said report shall be submitted to the Secretary of War, to be presented at the next session of Congress

Approved, June 19, 1878.

CHAP. 359.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1879, and for other purposes. June 20, 1878.
Vol. 20, p. 206.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and seventy-nine, namely:

* * * * *

To enable the Secretary of War to pay to the Hartford and New York Steamboat Company for dredging done in the Connecticut River, under the direction of Major G. K. Warren, United States Engineers, in the months of July, August, and September, eighteen hundred and seventy-six, four thousand two hundred and three dollars. Hartford and
New York Steam-
boat Co.

For payment of George F. Wheeler, Robert H. Hotchkiss and Aaron Walters, for services rendered by them as commissioners appointed pursuant to an act of Congress of March third, eighteen hundred and seventy-five, to appraise damages to lands in Fond du Lac County Wisconsin, caused by the improvement of the Fox and Wisconsin Rivers, five thousand three hundred and ten dollars. G. F. Wheeler.
R. H. Hotchkiss.
A. Walters.
1875, c. 166; 18
Stat., 506.

* * * * *

The requisite amount is hereby appropriated, out of any money in the Treasury not otherwise appropriated, to pay all money that may become due and owing to James B. Eads and his associates, or that may become payable to said Eads, his assigns or legal representatives, in accordance with the provisions of the act approved March third, eighteen hundred and seventy-five, and the act amendatory thereof, prior to the first day of February, eighteen hundred and seventy-nine. James B. Eads.
South Pass,
Mississippi River.

1875, c. 134; 18
Stat., 463.
1878, c. 313.

* * * * *

Approved, June 20, 1878.

June 20, 1878.
Vol. 20, p. 585.

CHAP. 371.—An Act For the relief of the families of the men who perished on the United States dredge-boat McAlister [McAlester].

Dredge boat
McAlester.
Payment to
widows, etc., of
persons lost with.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the widow, or minor child or children, and in case there be no widow, minor child or children, then the parent or parents, of the officers, seamen, marines and others in the service or employ of the government, who were lost with the said dredge-boat McAlister, shall be entitled to and receive, out of any money in the Treasury of the United States, not otherwise appropriated, a sum equal to twelve months' pay of their respective deceased relations aforesaid, in addition to the pay due to the deceased up to and including the day of the loss of said vessel.

On what evi-
dence.

SEC. 2. That the Secretary of the Treasury is authorized and directed to make the payments herein provided upon proper evidence being furnished.

Approved, June 20, 1878.

Jan. 13, 1879.
Vol. 20, p. 591.

CHAP. 16.—An Act For the relief of the legal representatives of George Williams deceased.

George Wil-
liams, settlement
of claim.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and is hereby, authorized to adjust and settle, upon just and equitable terms, the claim of George Williams for balance due for building locks two, three, and four of Muscle Shoals Canal on Tennessee River, and on a contract for section-work, done under power of attorney from Matthew G. Kennedy: *Provided*, That in making said settlement the said Secretary of War shall not allow the legal representatives of said George Williams, deceased, more than his actual expenditures, with reasonable compensation for the use of tools, and for money advanced in the prosecution of said work: *And provided further*, That no allowance or payment shall be made under this act except in pursuance of a recommendation of a board of not less than three engineers to be appointed by the Secretary of War to inquire into and report upon the character and value of the work done and the merits of the claim^a.

Approved, January 13, 1879.

Mar. 3, 1879.
Vol. 20, p. 363.

CHAP. 181.—An Act Making appropriations for the construction, repair, preservation, and completion of certain works on rivers and harbors, and for other purposes.

Rivers and har-
bors.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropri-

^a The amount paid under this act was \$101,536.72.

ated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended, under the direction of the Secretary of War, for the construction, completion, repair and preservation of the public works hereinafter named:

For improving Penobscot River, Maine, six thousand dollars. Penobscot River.

For improving harbor at Belfast, Maine, five thousand dollars. Belfast Harbor.

For improving Richmond Island Harbor, Maine, three thousand dollars. Richmond Island Harbor.

For improving Kennebunk River, Maine, two thousand dollars. Kennebunk River.

For improving Merrimac River, Massachusetts, five thousand dollars. Merrimac River.

For repair of harbor at Plymouth, Massachusetts, three thousand five hundred dollars. Plymouth Harbor.

For the maintenance and annual repairs of the harbor at Provincetown, Massachusetts, one thousand dollars. Provincetown Harbor.

For improving the harbor of Hyannis, Massachusetts, two thousand five hundred dollars; of which sum five hundred dollars, or so much thereof as may be necessary, shall be expended in the removal of the wreck at that point. Hyannis Harbor.

For improving Taunton River, Massachusetts, one thousand dollars. Taunton River.

For improving Providence River and Narragansett Bay, Rhode Island, sixty thousand dollars. Providence River and Narragansett Bay.

For improving Little Narragansett Bay, Rhode Island and Connecticut, five thousand dollars. Little Narragansett Bay.

For improving Connecticut River below Hartford, Connecticut, including dredging between Hartford and Middletown, ten thousand dollars. Connecticut River.

For improving harbor at Stonington, Connecticut, thirty-seven thousand five hundred dollars. Stonington Harbor.

For improving Thames River, Connecticut, to secure a fourteen-foot channel twelve thousand dollars. Thames River.

For improving harbor at Bridgeport, Connecticut, ten thousand dollars. Bridgeport Harbor.

For improving harbor at Norwalk, Connecticut, ten thousand dollars: of which sum not exceeding one thousand five hundred dollars shall be expended on the bar below the bridge. Norwalk Harbor.

For improving harbor at Port Jefferson, Long Island Sound, New York, five thousand dollars. Port Jefferson Harbor.

For improving harbor at New Haven, Connecticut, fifteen thousand dollars. New Haven Harbor.

For improving Hudson River, New York, thirty thousand dollars. Hudson River.

For removing obstructions in East River and Hell Gate, New York, two hundred and fifty thousand dollars. East River and Hell Gate.

For improving Echo Harbor, New Rochelle, New York, three thousand dollars. Echo Harbor.

For improving harbor at Plattsburg, New York, dredging, two thousand dollars. Plattsburg Harbor.

Raritan River.	For improving Raritan River, New Jersey, sixty thousand dollars.
Superior Bay.	For improving Superior Bay, Wisconsin, five thousand dollars.
Duluth Harbor.	For improving Duluth Harbor, Minnesota, twenty-five thousand dollars.
Passaic River.	For improving Passaic River, New Jersey, two thousand dollars.
East Chester Creek.	For improving East Chester Creek, New York, three thousand five hundred dollars.
Burlington Harbor, Vt.	For improving harbor at Burlington, Vermont, fifteen thousand dollars.
Swanton Harbor.	For improving harbor at Swanton, Vermont, six thousand dollars.
Otter Creek.	For improving Otter Creek, Vermont, five thousand dollars.
Lewes pier.	For constructing pier in Delaware Bay, near Lewes, Delaware, ten thousand five hundred dollars.
Newcastle ice harbor.	For piers of ice-harbor at New Castle, Delaware, five thousand five hundred dollars.
Wilmington Harbor, Del.	For improving harbor at Wilmington, Delaware, three thousand five hundred dollars.
Schuylkill River.	For improving Schuylkill River, Pennsylvania, twenty-five thousand dollars.
Delaware River.	For improving Delaware River below Bridesburg, Pennsylvania, forty-five thousand dollars.
Delaware River.	For improving Delaware River between Trenton and White Hill, New Jersey, six thousand dollars.
Allegheny River.	For the improvement of the navigation of the Allegheny River from the mouth of French Creek to Pittsburgh, Pennsylvania, ten thousand dollars.
Cohansey Creek.	For improving Cohansey Creek, New Jersey, four thousand five hundred dollars.
Baltimore Harbor.	For improving harbor at Baltimore, Maryland, one hundred and sixty thousand dollars.
Wicomico River.	For improving Wicomico River ^a , Maryland, three thousand dollars.
James River.	For improving James River, Virginia, seventy-five thousand dollars.
Appomattox River.	For improving Appomattox River, Virginia, twenty thousand dollars.
Kanawha River.	For improving Great Kanawha River, West Virginia, one hundred and fifty thousand dollars.
1879, c. 15.	
Cape Fear River.	For improving Cape Fear River, North Carolina, one hundred thousand dollars.
Breton Bay.	For improving Breton Bay, Leonardtown, Maryland, four thousand dollars.
Nomini Creek.	For improving mouth of Nomoni Creek, Virginia, two thousand five hundred dollars.
Rappahannock River.	For improving Rappahannock River, Virginia, ten thousand dollars.

^a On the eastern shore.

For improving harbor at Norfolk, Virginia, and its approaches, seventy-five thousand dollars. Norfolk Harbor.

For improving the harbors and channels at Washington and Georgetown, District of Columbia, fifty thousand dollars; of which sum twenty thousand dollars shall be expended in dredging the channel of the Potomac River between the Long Bridge and the United States Arsenal, and thirty thousand dollars shall be expended in Georgetown harbor and channel; and the whole of said sum of fifty thousand dollars is hereby directed to be so expended as to produce the greatest immediate benefit to navigation and commerce. Washington Harbor.
Georgetown Harbor.

For improving Blackwater River, Virginia, two thousand five hundred dollars. Blackwater River.

For improving Neuse River, North Carolina, forty-five thousand dollars. Neuse River.

For improving Hampton River, Virginia, two thousand dollars. Hampton River.

For improving Chickahominy River, Virginia, one thousand dollars. Chickahominy River.

For improving French Broad River, North Carolina, five thousand dollars. French Broad River.

For improving Pamlico River, North Carolina, three thousand dollars. Pamlico River.

For improving harbor at Edenton, North Carolina, one thousand dollars. Edenton Harbor.

For improving harbor at Charleston, South Carolina, two hundred thousand dollars. Charleston Harbor, S. C.

For improving harbor at Savannah, Georgia, one hundred thousand dollars. Savannah Harbor.

For improving inside passage between Fernandina and Saint John's, Florida, seven thousand dollars. Fernandina and St. Johns passage.

For improving harbor at Cedar Keys, Florida, including removal of wrecks, fifteen thousand dollars. Cedar Keys Harbor.

For improving Choctawhatchee River, Florida and Alabama, five thousand dollars. Choctawhatchee River.

For improving Alabama River, Alabama, thirty thousand dollars. Alabama River.

For improving Chattahoochee River, Georgia, fifteen thousand dollars. Chattahoochee River.

For improving Flint River, Georgia, seven thousand dollars. Flint River.

For improving Saint Augustin's Creek, Georgia, five thousand dollars. St. Augustin Creek.

For improving Warrior and Tombigbee Rivers, Alabama and Mississippi, thirty thousand dollars; of which sum ten thousand dollars shall be expended on the Tombigbee above Columbus, and twenty thousand dollars on the Warrior and Tombigbee below Columbus. Warrior and Tombigbee rivers.

For improving the Apalachicola River, Florida, including the slough connecting the Apalachicola with the Chippola River, five thousand dollars. Apalachicola River, etc.

- New River. For improving New River from Lead Mines in Wythe County, Virginia, to mouth of Greenbrier, twelve thousand dollars.
- Pensacola Harbor. For improving Pensacola Harbor, Florida, ten thousand dollars.
- New Orleans Harbor. For improving harbor at New Orleans, Louisiana, sixty thousand dollars.
- Sabine Pass. For deepening channel of Sabine Pass and at Blue Buck Bar, Texas, twenty-five thousand dollars.
- Galveston Harbor. For improving entrance to Galveston Harbor, Texas, one hundred thousand dollars.
- Sabine River. For improving Narrows of Sabine River above Orange, Texas, and to deepen the channel at the mouth of the Sabine River, six thousand dollars.
- Trinity River. For improving mouth of Trinity River, Texas, two thousand five hundred dollars.
- Neches River. For improving mouth of Neches River, Texas, five thousand dollars.
- Pass Cavallo Inlet. For improving Passo Cavallo Inlet into Matagorda Bay, Texas, twenty-five thousand dollars.
- Examination and surveys of South Pass. For examinations and surveys of South Pass of the Mississippi River: To ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at the South Pass of the Mississippi River, and to enable the Secretary of War to report during the construction of the work the payments made from time to time, and the probable times of other payments, and to report during the construction of the work all important facts relating to the progress of the same, materials used, and the character and permanency with which the said jetties and auxiliary works are being constructed, as required by act approved March third, eighteen hundred and seventy-five, and act approved June nineteenth, eighteen hundred and seventy-eight, which impose on the engineer officer the duty of certifying to the correctness of expenditures for labor, material, and so forth, amounting to five hundred thousand dollars, to be paid Mr. Eads in monthly installments, twenty-four thousand dollars.
- 1875, c. 134, 18
Stat., 463.
1878, c. 313.
- Red River raft. For removing raft in Red River and closing Tones Bayou, Louisiana, fifteen thousand dollars.
- Red River. For removing obstructions from Red River, Louisiana, twenty-two thousand five hundred dollars.
- Cypress Bayou. For improving Cypress Bayou, Texas and Louisiana, six thousand dollars.
- Red River. For improving mouth of Red River, Louisiana, forty thousand dollars.
- Mississippi River. For improving harbor and the Mississippi River at Memphis, Tennessee, thirty-seven thousand dollars.
- Mississippi River. For improving Mississippi River at and near Vicksburg, and protection of harbor at Vicksburg, Mississippi, fifty thousand dollars.
- Ouachita River. For improving Ouachita River, Arkansas and Louisiana, ten thousand dollars.

For improving Yazoo River, Mississippi, fifteen thousand dollars. Yazoo River.

For annual expense of gauging the waters of the Mississippi River and its tributaries: Continuing observation of the rise and fall of the river and its chief tributaries, as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars. Mississippi River.
1871, res. 40; 16 Stat. L., 598.

For improving Mississippi, Missouri, and Arkansas Rivers: Removing snags, sand-bars, wrecks, and other obstructions, and correcting and deepening the channel, one hundred and ninety thousand dollars; of which sum one hundred thousand dollars shall be expended on the Mississippi River, sixty thousand dollars shall be expended on the Missouri River, and thirty thousand dollars shall be expended on the Arkansas River. Mississippi, Missouri, and Arkansas rivers.

For improving Mississippi River from Saint Paul to Des Moines Rapids, one hundred thousand dollars: *Provided*, That not exceeding twenty thousand dollars thereof may be used by the Secretary of War in his discretion in making a practical test of the flume invented by M. J. Adams, the said test to be made under the supervision and direction of said Adams, but without compensation to said Adams for his services; *And provided further*, That such test shall not be made until the right shall be secured to the United States to use said flume, in the event of the favorable result of said test, upon terms satisfactory to the Secretary of War. Mississippi River.
Proviso.
Adams's flume
Proviso.

For survey of Missouri River from its mouth to Fort Benton, Montana, thirty thousand dollars. Missouri River.

For improving Missouri River at or near Fort Leavenworth, ten thousand dollars. Missouri River.

For improvement of Arkansas River, between Fort Smith, Arkansas, and Wichita, Kansas, twenty thousand dollars. Arkansas River.

For improving Missouri River at Sioux City, Iowa, ten thousand dollars; which sum shall be available on the passage of this act. Missouri River.

For improving Missouri River at Atchison, Kansas, twenty thousand dollars. Missouri River.

For improving Missouri River opposite Saint Joseph, nine thousand dollars. Missouri River.

For improving Missouri River at Eastport, Iowa, and at Nebraska City, Nebraska, thirty thousand dollars. Missouri River.

For improving Missouri River at Council Bluffs, Iowa, and at Omaha, Nebraska, fifty thousand dollars. Missouri River.

For improving Missouri River above mouth of the Yellowstone River, forty-five thousand dollars. Missouri River.

For improving the Mississippi River between the mouths of the Illinois and Ohio Rivers, two hundred thousand dollars; of which sum, fifteen thousand dollars shall be expended between the mouths of the Illinois and Missouri Rivers, thirty thousand dollars between the foot of Dickey's Island and the mouth of the Ohio River, and eight thousand Mississippi River.

dollars between Islands Numbers Fourteen and Fifteen, near the town of Kaskaskia, Illinois.

Upper Mississippi River.	For improving Upper Mississippi River: Operating snag-boat twenty thousand dollars.
Mississippi River.	For improving Mississippi River from Des Moines Rapids to mouth of the Illinois River, forty thousand dollars.
White River.	For improving White River, Arkansas, ten thousand dollars.
Rush Chute.	For improving Rush Chute and the harbor of Burlington, Iowa, five thousand dollars.
Fort Madison Harbor.	For improving harbor at Fort Madison, Iowa, three thousand six hundred dollars.
Mississippi River.	For removing bar in the Mississippi River opposite Dubuque, Iowa, four thousand dollars.
Des Moines Rapids.	For improving Des Moines Rapids, twenty-five thousand dollars.
Canal at Des Moines Rapids.	For operating the canal at Des Moines Rapids, forty thousand dollars.
Rock Island Rapids.	For improving Rock Island Rapids, Mississippi River, six thousand dollars.
Galena River.	For improving Galena River and harbor, Illinois, twelve thousand dollars.
St. Croix River.	For improving Saint Croix River below Taylor's Falls, eight thousand dollars.
Red River of the North.	For improving Red River of the North, Minnesota, and Dakota, exclusively for dredging, twenty-five thousand dollars.
Illinois River.	For improving Illinois River, forty thousand dollars.
Cumberland River.	For improving Cumberland River below Nashville, Tennessee, forty thousand dollars.
Fourche Le Fevre River.	For improving Fourche Le Fevre River, Arkansas, ten thousand dollars.
Cumberland River.	For improving Cumberland River above Nashville, Tennessee, thirty-nine thousand dollars; of which sum eighteen thousand dollars shall be expended from Nashville to the Kentucky line, six thousand dollars from the Kentucky line to Smith's Shoals, and fifteen thousand dollars at Smith's Shoals.
Tennessee River.	For improving Tennessee River above Chattanooga, eleven thousand five hundred dollars.
Tennessee River.	For improving Tennessee River below Chattanooga, including Muscle Shoals, and Duck River Shoal, and the Shoal at Reynoldsburg, two hundred and ten thousand dollars:
Proviso.	<i>Provided</i> , That whenever, in the prosecution or maintenance of the work of improving Tennessee River between Decatur and Florence, in the State of Alabama, it may be necessary, in the judgment of the Secretary of War, to take possession of any lands for canals or cut-offs, and a reasonable price for the same can be agreed upon between the owner of said lands and the officer in charge of said work on the part of the United States, the Secretary of War may authorize the purchase of said lands: <i>Provided</i> , That in case the owners of said lands shall refuse to sell the same at a reasonable price, then the price to be paid shall be deter-
Lands for cut-offs.	
Proviso.	

mined, and the title and jurisdiction procured, in the manner prescribed by the laws of the State of Alabama; *And provided*, That in either case the entire cost of such lands to the United States shall not exceed ten thousand dollars.

In consideration of the proposition of the Buffalo Bayou Ship Channel Company to turn over their work at Morgan's Point, and to surrender their charter granted by the legislature of Texas, and the rights accruing thereunder, to the United States, which proposition is now on file in the War Department, and is hereby accepted, the Government hereby adopts the line surveyed from the cut in Red Fish Bar to the cut in Morgan's Point, and the sum of eighty thousand dollars is hereby appropriated for the improvement of that line; *Provided*, That no part of said sum shall be expended until said Buffalo Bayou Ship Channel Company shall file with the Secretary of War in manner and form to be by him approved, their acceptance of this provision of this act.

For improving Coosa River, Georgia and Alabama, forty-five thousand dollars.

For improving Hiwassee River, Tennessee, three thousand dollars.

For improving Oostenaula and Coosawattee Rivers, Georgia, three thousand dollars.

For improving Ocmulgee River, Georgia, seven thousand dollars.

For improving Oconee River, Georgia, one thousand five hundred dollars.

For an ice harbor at the mouth of the Muskingum River, Ohio, thirty thousand dollars.

For improving the Ohio River, two hundred and fifty thousand dollars; of which sum fifty thousand dollars, or so much thereof as may be necessary, shall be expended in the removal of obstructions at Grand Chain, and not exceeding one hundred thousand dollars on the Davis Island Dam.

For improving Little Kanawha River, West Virginia, dredging, removing obstructions, and for wing dams, if required, eighteen thousand dollars.

For improving Guyandotte River, West Virginia, one thousand dollars.

For improving harbor at Ontonagon, Michigan, seventeen thousand dollars; of which sum fifteen thousand dollars shall be expended in the construction of piers, and two thousand dollars in dredging.

For improving Big Sandy River from Catlettsburg, Kentucky, to Head of Navigation, twelve thousand dollars.

For improving Wabash River, Indiana, twenty thousand dollars.

For improving Eagle Harbor, Michigan, two thousand dollars.

For improving harbor at Marquette, Michigan, for repairs, one thousand five hundred dollars.

For improving harbor at Menomonee, Wisconsin, ten thousand dollars.

Condemnation.

Proviso.

Total cost.

Buffalo Bayou ship channel, V. 26, p. 456; *post*, p. 585.

Proviso.

Coosa River.

Hiwassee River.

Oostenaula and Coosawattee rivers.

Ocmulgee River.

Oconee River.

Muskingum River ice harbor.

Ohio River.

Little Kanawha River.

Guyandotte River.

Ontonagon Harbor.

Big Sandy River.

Wabash River.

Eagle Harbor.

Marquette Harbor.

Menominee Harbor.

Green Bay Harbor.	For improving harbor at Green Bay, Wisconsin, four thousand dollars.
Sturgeon Bay harbor of refuge.	For harbor of refuge at entrance of Sturgeon Bay Canal, Wisconsin, thirty thousand dollars.
Ahnapee Harbor.	For improving harbor at Ahnapee, Wisconsin, seven thousand dollars.
Two Rivers Harbor.	For improving harbor at Two Rivers, Wisconsin, twenty thousand dollars.
Manitowoc Harbor.	For improving harbor at Manitowoc, Wisconsin, six thousand five hundred dollars.
Sheboygan Harbor.	For improving harbor at Sheboygan, Wisconsin, repairs and dredging, three thousand dollars.
Port Washington Harbor.	For improving harbor at Port Washington, Wisconsin, seven thousand five hundred dollars.
Milwaukee Harbor.	For improving harbor at Milwaukee, Wisconsin, seven thousand five hundred dollars.
Racine Harbor.	For improving harbor at Racine, Wisconsin, six thousand dollars.
Kenosha Harbor.	For improving harbor at Kenosha, Wisconsin, five thousand dollars.
Fox and Wisconsin rivers.	For improving Fox and Wisconsin River, Wisconsin, one hundred and fifty thousand dollars.
Chicago Harbor.	For improving harbor at Chicago, Illinois, seventy-five thousand dollars.
Calumet Harbor.	For improving harbor at Calumet, Illinois, twelve thousand dollars.
Michigan City Harbor.	For improving harbor at Michigan City, Indiana, forty thousand dollars.
Charlevoix Harbor.	For improving harbor at Charlevoix, Michigan, nine thousand dollars.
Frankfort Harbor.	For improving harbor at Frankfort, Michigan, four thousand dollars.
Manistee Harbor.	For improving harbor at Manistee, Michigan, ten thousand dollars.
Ludington Harbor.	For improving harbor at Ludington, Michigan, five thousand dollars.
Pentwater Harbor.	For improving harbor at Pentwater, Michigan, six thousand dollars.
White River Harbor.	For improving harbor at White River, Michigan, seven thousand five hundred dollars.
St. Marys River and canal.	For improving Saint Mary's River and Saint Mary's Falls Canal three hundred thousand dollars; of which sum two hundred thousand dollars shall be expended on the canal, and one hundred thousand dollars shall be expended on the survey and improvement of the river towards obtaining a depth in present channel of sixteen feet.
Grand Haven Harbor.	For improving harbor at Grand Haven, Michigan, nine thousand dollars.
Black Lake (Holland) Harbor.	For improving harbor at Black Lake, Michigan, six thousand dollars.
Saugatuck Harbor.	For improving harbor at Saugatuck, Michigan, five thousand dollars.
South Haven Harbor.	For improving harbor at South Haven, Michigan, seven thousand five hundred dollars.

For improving river and harbor at Saint Joseph, Michigan, six thousand dollars.	St. Joseph River and Harbor.
For harbor of refuge, at Lake Huron, Michigan, seventy-five thousand dollars.	Sand beach (Harbor Beach).
For improving Detroit River, Michigan, fifty thousand dollars.	Detroit River.
For improving Saint Clair Flats, Michigan, repairs of canal, three thousand dollars.	St. Clair flats.
For improving harbor at Muskegon, Michigan, five thousand dollars.	Muskegon Harbor.
For improving Saginaw River, Michigan, eight thousand dollars.	Saginaw River.
For improving harbor at Cheboygan, Michigan, three thousand dollars.	Cheboygan Harbor.
For improving harbor at Monroe, Michigan, two thousand dollars.	Monroe Harbor.
For improving harbor and river at Au Sable, Michigan, seven thousand dollars.	Au Sable Harbor and River.
For improving harbor at Toledo, Ohio, twenty thousand dollars.	Toledo Harbor.
For improving harbor at Port Clinton, Ohio, ten thousand dollars.	Port Clinton Harbor.
For improving and surveying harbor at Sandusky City, Ohio, one thousand dollars.	Sandusky Harbor.
For improving harbor at Cleveland, Ohio, one hundred thousand dollars.	Cleveland Harbor.
For improving harbor at Ashtabula, Ohio, nine thousand dollars.	Ashtabula Harbor.
For improving harbor at Erie, Pennsylvania, twenty-five thousand dollars.	Erie Harbor.
For improving harbor at Buffalo, New York, one hundred thousand dollars.	Buffalo Harbor.
For improving harbor at Oak Orchard, New York, one thousand dollars.	Oak Orchard Harbor.
For improving harbor at Charlotte, New York, repair of piers, one thousand dollars.	Charlotte Harbor.
For improving harbor at Pultneyville, New York, four thousand dollars.	Pultneyville Harbor.
For improving harbor at Great Sodus Bay, New York, two thousand dollars.	Great Sodus Bay Harbor.
For improving Oakland Harbor, California, sixty thousand dollars; but this sum shall not be available until the right of the United States to the bed of the estuary and training-walls of this work is secured, free of expense, to the Government, in a manner satisfactory to the Secretary of War; and if said right shall not have been so secured by September first, eighteen hundred and seventy-nine, said sum shall be returned into the Treasury.	Oakland Harbor. Conditions.
For improving harbor at Little Sodus Bay, New York, five thousand dollars.	Little Sodus Bay Harbor.
For improving harbor at Oswego, New York, ninety thousand dollars.	Oswego Harbor.
For improving harbor at Wilmington, California, twelve thousand dollars.	Wilmington Harbor, Cal.

- Sacramento River. For improving Sacramento River, California, twenty thousand dollars.
- Lower Willamette and Columbia rivers. For improving Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea, forty-five thousand dollars.
- Upper Willamette River. For improving Upper Willamette River, twelve thousand dollars.
- Upper Columbia and Snake rivers. For improving Upper Columbia River, including Snake River, twenty thousand dollars.
- Cascades Canal. For constructing canal around the Cascades of Columbia River, one hundred thousand dollars.
- Columbia River bar. For continuing the survey and observation of currents at the bar of the mouth of the Columbia River, five thousand dollars.
- River bank at Fort Brown. For protection of river-bank at Fort Brown, Texas, seven thousand dollars.
- Reservoirs at sources of Mississippi and other rivers. For examinations and surveys for reservoir at sources of the Mississippi, Saint Croix, Chippewa, and Wisconsin Rivers: Completing survey, twenty-five thousand dollars.
- Coos Bay and Harbor. For improving the entrance to Coos Bay and harbor of, Oregon, forty thousand dollars.
- Lower Clearwater River. For improving Lower Clearwater River, Idaho, five thousand dollars.
- Elk River. For improving Elk River, West Virginia, the sum of five thousand dollars, appropriated by the act of June eighteenth, eighteen hundred and seventy-eight, is directed to be expended in the removal of obstructions to open navigation from Braxton Court House to the mouth of Big Sandy; *Provided, however*, That not exceeding five hundred dollars thereof may be expended for the improvement of steamboat navigation at Jarrett's Ford, but in no way to obstruct navigation by boats and rafts.
- 1878, c. 264.
- Proviso.*
- Scuppernon River. For improving Scuppernon River, North Carolina, two thousand dollars.
- Mispillion River. For improving Mispillion Creek, Delaware, three thousand dollars.
- Delaware River. For improving Delaware River at or near Cherry Island Flats, one hundred thousand dollars.
- Kentucky River. For improving the Kentucky River from the mouth to Three Forks, according to estimate and report of Major William E. Merrill, January fourteenth, eighteen hundred and seventy-nine, one hundred thousand dollars.
- 1879, c. 15.
- Woodbridge Creek. For improving Woodbridge Creek, New Jersey, four thousand dollars.
- Elizabeth River. For improving Elizabeth River, New Jersey, to secure a seven-foot channel, seven thousand five hundred dollars.
- Rahway River. For improving Rahway River, New Jersey, deepening channel, and removing obstructions, ten thousand dollars.
- Flushing Bay. For improving Flushing Bay, New York, twenty thousand dollars.
- Yellowstone River. For improving Yellowstone River, twenty-five thousand dollars.
- Mobile Harbor. For improving Mobile Harbor, to secure a seventeen-foot channel, one hundred thousand dollars.

For improving and repairing San Diego Harbor, California, one thousand dollars. San Diego Harbor.

For improving Big Sunflower River, Mississippi, twenty thousand dollars. Big Sunflower River.

For improving Coldwater River, Mississippi, seven thousand dollars. Coldwater River.

For improving Tallahatchie River, Mississippi, six thousand dollars. Tallahatchie River.

For improving Upper Red River from Fulton to the head of the Raft, ten thousand dollars. Upper Red River.

For improving Urbana Creek, Virginia, five thousand dollars. Urbana Creek.

For improving Monongahela River, West Virginia and Pennsylvania, to be expended in completing lock and dam at Hoard's Rock, twenty-four thousand dollars. Monongahela River.

For improving Boston Harbor, to be expended in the improvement of Anchorage Shoals, the channel at the lower middle, and dredging the upper harbor, near the mouth of Mystic River, fifty thousand dollars. Boston Harbor.

For improving Staunton River, Virginia, five thousand dollars. Staunton River.

For improving Missouri River at Cedar City, ten thousand dollars. Missouri River.

For improving Missouri River at and near Glasgow, fifteen thousand dollars. Missouri River.

For improving Bayou La Fourche, Louisiana, including removal of obstructions and deepening of channel, ten thousand dollars. Bayou La-fourche.

For construction of breakwater at New Haven, Connecticut, thirty thousand dollars. New Haven breakwater.

For improving entrance to Woods Holl Harbor, Massachusetts, fifteen thousand dollars, to secure a channel two hundred feet wide and ten feet deep. Woods Hole Harbor.

For improving Manasquan River, New Jersey, twelve thousand dollars. Manasquan River.

For improving harbor at Grand Marais, Minnesota, ten thousand dollars. Grand Marais Harbor.

For improving harbor at Muscatine, Iowa, seven thousand five hundred dollars. Muscatine Harbor.

For improving White and Saint Francis rivers, Arkansas, twelve thousand dollars. White and St. Francis rivers.

For improving L'Anguille River, Arkansas, five thousand dollars. L'Anguille River.

For ice harbor at or near Cincinnati, Ohio, the sum of fifty thousand dollars, appropriated by act of June eighteenth, eighteen hundred and seventy-eight, is hereby declared available for the ensuing year. Cincinnati ice harbor.
1878, c. 264.

For improving Cambridge Harbor and Pocomoke River, Maryland, two thousand five hundred dollars each. Cambridge Harbor.
Pocomoke.

For improving harbor at Queenstown, Maryland, three thousand dollars. Queenstown Harbor.

For improving North Landing River, Virginia and North Carolina, twenty-five thousand dollars. North Landing River.

- Lubec Channel. For improving Lubec Channel, Maine, ten thousand dollars; and for the purpose of this improvement the unexpended balance of the appropriations made for the improvement of the Saint Croix River by the acts of March second, 1867, c. 144, 14 Stat., 420. 1873, c. 233, 17 Stat., 565. 1874, c. 457, 18 Stat., 241. hundred and seventy-three, and June twenty-third, eighteen hundred and seventy-four, are hereby made available.
- Portage Lake harbor of refuge. For harbor of refuge at Portage Lake, Lake Michigan, ten thousand dollars.
- Onancock. For Onancock Harbor, Virginia, three thousand dollars.
- Trent River. For improving Trent River, North Carolina, seven thousand dollars.
- Tar River. For improving Tar River, North Carolina, three thousand dollars.
- Aransas Pass and Bay. For improving Aransas Pass and Bay up to Rockport and Corpus Christi, Texas, thirty-five thousand dollars; which sum shall be expended in deepening the channel across the outer bar of Aransas Pass and the protection of the head of Mustang Island: *Provided*, That if the expenditure of said sum in the manner indicated herein involve the improvement of any channel or way owned or controlled by any corporation or person with the right to levy tolls or otherwise to affect the navigation and commerce thereof, no part of said sum shall be expended until such right, ownership, and control shall have been surrendered and relinquished to the United States, free of cost, in manner and form to be approved by the Secretary of War.
- Missouri River. For improvement of Missouri River at Vermillion, Dakota, five thousand dollars.
- Brunswick Harbor. For improving Brunswick Harbor, Georgia, twenty thousand dollars.
- Portsmouth Harbor. For improving Portsmouth Harbor, New Hampshire, ten thousand dollars.
- Missouri River. For improving Missouri River, at or near Kansas City, thirty thousand dollars.
- Pascagoula River. For improving Pascagoula River, Mississippi, fourteen thousand dollars.
- Pearl River. For improving Pearl River, Mississippi from Jackson to Carthage, six thousand dollars.
- Osage River. For improving the Osage River, Kansas and Missouri, twenty thousand dollars.
- White River, Ind. For improving White River, Indiana, from the Wabash River to Portersville and to the Falls on West Fork, according to report of Chief of Engineers, without constructing locks and dams, twenty-five thousand dollars.
- St. Anthony's Falls. For sluiceway through public works at Saint Anthony's Falls, Minnesota, ten thousand dollars: *Provided*, That no part of said sum shall be expended for right of way, and that said improvement can be made without expense to the United States further than the actual construction of said sluiceway.
- Chippewa River. For the protection of the high sand-banks on the Chippewa River, Wisconsin, to prevent their erosion and depo-

sition in the Mississippi River, eight thousand dollars: *Provided*, That nothing shall be done, nor shall any improvement be made, on the said Chippewa River, under or in pursuance of this act, or the appropriation hereby made, which shall, directly or indirectly, prevent, interfere with, or obstruct the free navigation of the said river, as heretofore, by steamboat, or other water craft, or the free use thereof, as heretofore, for the running, floating, guiding, or sheering of loose logs or rafts of lumber, or logs upon or down the same, or which shall directly or indirectly, prevent, obstruct, or interfere with the use of any slough, arm, or branch of the said river, as heretofore, for the holding, assorting, or rafting of logs therein.

Proviso.

Free navigation to be preserved.

For improving Shrewsbury River, New Jersey, ten thousand dollars.

Shrewsbury River.

For improving navigation of Mississippi River, at Quincy, Illinois, twenty thousand dollars.

Mississippi River.

For improving Harlem River, New York, one hundred thousand dollars; but this appropriation is made subject to the provisions and limitations contained in the act of June eighteenth, eighteen hundred and seventy-eight, relating to said Harlem River improvement and the right of way therefor.

Harlem River.

Proviso.

1878, c. 264.

For improving Delaware River at Schooner Ledge, fifty thousand dollars;

Delaware River.

That the sum of one hundred and fifty thousand dollars^[a] be, and the same is hereby, appropriated, out of any moneys in the Treasury not otherwise appropriated, to be expended by the Secretary of War in the commencement of the construction of a breakwater and harbor of refuge at such point on the Pacific Ocean between the Straits of [Juan de] Fuca and San Francisco, California, as may, in the opinion of a majority of the board of United States engineers for the Pacific coast, be most suitable, the interests of commerce, local and general, being considered.

Harbor of refuge, Pacific coast.
V. 22, p. 209.
Post, p. 383.
V. 29, p. 214.
Post, p. 761.

For continuing the improvement of Currituck Sound and North River Bar, North Carolina, twenty-five thousand dollars.

Currituck Sound.

For dredging a channel in the Potomac River through the flats in front of the landing at Mount Vernon, four thousand dollars.

Potomac River.

For Yadkin River, North Carolina, twenty thousand dollars.

Yadkin River.

It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements, other than surveys and estimates, in carrying on the various works by contract or by hired labor, at his discretion, and as in his judgment may be most advantageous to the government: and, where said works are done by contract, such contracts shall be made after sufficient public advertisement for pro-

Manner of making improvements.

Contracts after advertisement.

^a Act of Aug. 2, 1882, authorizes the expenditure of this appropriation in the construction of a harbor of refuge at Port Orford, Oreg. By act of June 3, 1896, the unexpended balance was made available for wharf construction at Graveyard Point, in said harbor.

posals in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders therefor, accompanied by such securities as the Secretary of War shall require.

Examinations
and surveys.

SEC. 2. That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, and estimates of cost of improvements proper, to be made at the following points, namely:

The outlet of Lake Winnepesaukee, New Hampshire;
Nantucket Harbor, Massachusetts;
Broad Bay, Virginia;
Link Horn Bay, Virginia;
Lin Haven Bay, Virginia;
Chincoteague Inlet, Virginia;
Shenandoah River, Virginia and West Virginia.
Cathance^a, Maine;

The Delaware at Chester and Marcus Hook, Pennsylvania, to ascertain its adaptability for an ice-harbor;

New Town Creek, at mouth of East River, New York;
Nanticoke River, Delaware and Maryland;
Channel leading into Cabin Creek, Maryland;
Northeast River, Maryland;
Lockwood's Folly River, North Carolina.

Tread Haven [Tred Avon] Creek, Maryland, for a distance of three miles below Eastern [Easton].

Slaughter Creek, Maryland.

Examinations
and surveys, con-
tinued.

Choptank River, Maryland between Denton and Greensboro';

Secretary Creek [Warwick River], Maryland.

Canal connecting Galveston and Brazos River, Texas.

Bayou Vermillion, Louisiana;

Bayou Teche, Louisiana;

Bayou Courtableau, Louisiana;

Coosa River, from the bridge of Selma River, Rane and Dalton [Selma, Rome and Dalton, now known as the East Tennessee, Virginia and Georgia] Railroad, to the city of Wetumpka, Alabama;

Duck River, from its mouth to Centerville, Tennessee.

Yallahusha River, Mississippi;

Noxubee River, Mississippi;

Cuivre River, Missouri;

The Gasconade River from its mouth to Vienna in Maries County, Missouri;

Arkansas River at Pine Bluff.

1878, c. 264.

Ohio River and mouth of Little Kanawha River, West Virginia, to ascertain the adaptability of that locality for an ice-harbor, including a report on the cost and merit of that point compared with the mouth of the Muskingum at Marietta, Ohio, surveyed under the provisions of the act of June eighteenth, eighteen hundred and seventy-eight;

Waukegan Harbor, Illinois and Illinois River:

^a The report submitted under this item related to a survey of Cathance River.

Alton Harbor, Illinois, and the Mississippi River opposite to the mouth of the Missouri:

Breakwater at Mackinac, Michigan;

Harbor of refuge at entrance to Portage Lake and Lake Superior Ship Canal;

Petaluma Creek, California;

Resurvey of Sabine River, Texas, from its mouth to East Hamilton;

Resurvey of Neches River, Texas, from the mouth of the Neches to Bevelport:

Resurvey of Trinity River, Texas, from its mouth to the bridge of the Great Northern Railroad.

Charlotte Harbor and Peace Creek, Florida;

Entrance to Cumberland Sound, Florida and Georgia;

Withlacooche River, Florida;

Black River, Arkansas;

Caney Fork [Caney Fork River], Cumberland River, Tennessee;

Saint Joseph River, from its mouth in Michigan to Elkhart, Indiana, including channel leading up to Benton Harbor;

Trinidad Harbor, California;

Sacramento River, California;

Tchula Lake, Mississippi;

Archer's Hope River, Virginia;

Susquehanna River, Pennsylvania;

Resurvey of Sebewaing Harbor, Michigan;

Resurvey of Clinton River, Michigan;

Resurvey of bar at mouth of Bell River, Michigan;

Aroostook River, Maine, from boundary line to Masardis;

Green River and its tributaries, Muddy and Barren Rivers, Kentucky;

Bayou Deglaize [Des Glaises], Louisiana;

Moosebec Bar, Jonesport, Maine;

South River, New Jersey, between Raritan River and Old Bridge;

Bayou Terrebonne, Louisiana;

Tchefuncta, Tichfaw, and Amite Rivers, Louisiana;

Cheesequakes Creek, New Jersey;

Allegheny River, from French Creek to Olean, New York;

Dan River, Virginia, from Clarksville, Virginia, to Danbury, North Carolina (continued);

The Mississippi, from Saint Paul to the Falls of Saint Anthony;

Oconto River, Wisconsin;

Wolf River^[a], Wisconsin (continued);

Superior Bay, to determine the best and most economical plan for harbor improvement for the head of Lake Superior;

Resurvey of Ogdensburg Harbor, New York;

Warrior, from Tuscaloosa to Forks of Sipsey and Mulberry, Alabama;

^a A tributary of Fox River.

Examinations
and surveys, con-
tinued.

Sipsey River, Alabama;

The Columbia River at the Dalles in Oregon, including plan and specifications for locks and canal around said point;

For an accurate examination and survey of Alsea Harbor, Oregon, and bar in front of it;

Umpqua River, Oregon, between Scottsburg and its mouth;

The Cowlitz River, Washington Territory, for purpose of ascertaining the cost of removing snags and other obstructions;

Ship canal across Bergen Neck in Hudson County, New Jersey;

Tuckahoe Creek, Maryland;

1879, c. 22.

Chattahoochie^[a] River, Alabama, from Geneva to Newton;

Pea River, Alabama, from Geneva to Elba;

Cheyenne River, Dakota;

Continuing survey of the Yellowstone River;

Port Royal [Beaufort] River, near Beaufort South Carolina;

Survey and estimate for York River Virginia;

Pamunkey River, in Virginia;

Bayfield Harbor, Wisconsin;

Ashland Harbor, Wisconsin;

Morristique [Manistique] River, Michigan;

Approaches from Lake Superior to Saint Mary's Falls Ship-Canal, for a sixteen-foot channel;

Kankakee River, Indiana and Illinois;

For survey of Broad Creek [Broad Creek River], a prong of the Nanticoke River, from its mouth to Laurel, Delaware;

For the resurvey of the outlet to Wolf Lake in Lake County, Indiana;

For survey of Waccamaw River, North Carolina;

For survey of Catawba River, North Carolina;

The Pee Dee Rivers^[b], South Carolina;

The Santee River, South Carolina;

The Wateree River, South Carolina;

The Broad River, South Carolina;

The Catawba River South Carolina;

For a survey and estimate for a breakwater to be constructed from a point at or near the new canal outlet near New Orleans Louisiana, to the Ponchartrain Railroad Wharf said breakwater to be so constructed as to serve as a harbor of refuge for all vessels^[c].

Expenses of ex-
aminations, etc.

SEC. 3. That for the examinations and surveys herein provided for, and for incidental repairs of harbors, for which there is no special appropriation, the sum of one hun-

^a Corrected by act approved June 14, 1879, to read *Choctawhatchee*.

^b Refers to the Great Pedee and the Little Pedee.

^c The location contemplated for the breakwater was in Lake Pontchartrain.

dred and fifty thousand dollars is hereby appropriated, to be paid out of any moneys in the Treasury not otherwise appropriated.

* * * * *

SEC. 9. That the fourth and succeeding sections of an act entitled "An act making appropriations for the repair, preservation, and completion of certain public works on rivers and harbors, and for other purposes" approved March third, anno Domini eighteen hundred and seventy-five, authorizing James B. Eads and his associates to create and permanently maintain a wide and deep channel between the South Pass of the Mississippi River and the Gulf of Mexico be, and they are hereby, amended so as to provide in lieu of the payments therein provided, that payment to said Eads or his legal representatives shall be made as follows, namely:

Eads South
Pass jetties.

1875, c. 134, 18
Stat., 468.
Amended.

The Secretary of War is hereby authorized and directed to draw his warrant upon the Secretary of the Treasury of the United States in favor of said James B. Eads or his legal representatives for the sum of seven hundred and fifty thousand dollars, which said sum is hereby appropriated; and the Secretary of the Treasury is hereby authorized and directed to pay to said Eads or his legal representatives, out of any money in the Treasury not otherwise appropriated, the sum for which said warrant is drawn.

Payments to
Eads.

When a channel shall have been obtained by the action of the jetties and auxiliary works authorized by said act twenty-five feet in depth, and not less than two hundred feet in width at the bottom, through the said jetties, there shall be paid five hundred thousand dollars.

When a channel shall have been obtained through the jetties twenty-six feet in depth, and not less than two hundred feet in width at the bottom, there shall be paid five hundred thousand dollars.

When a channel thirty feet in depth, without regard to width, shall have been obtained through the jetties, there shall be paid five hundred thousand dollars; and the one million dollars provided by the hereinbefore-recited act to be paid by the United States in ten and twenty years shall be earned by said Eads and his associates, and the same, with interest shall be paid to said Eads or his legal representatives, at the times and in the manner provided by said act.

The one hundred thousand dollars per annum provided by said recited act to be paid to said Eads and his associates during a period of twenty years shall be paid at the times and in the manner therein provided; upon the maintenance by said Eads and his associates of a channel through the jetties twenty-six feet in depth, not less than two hundred feet in width at the bottom, and having through it a central depth of thirty feet without regard to width.

Nothing herein contained shall be so construed as to repeal or in any wise affect the provisions of the amendatory act approved June nineteenth, anno Domini eighteen hun-

1878, c. 313.

1875, c. 134, 18
Stat., 463.

dred and seventy-eight, by which said Eads is entitled to receive certain moneys to pay for materials furnished, labor done, and expenditures incurred in the construction of the work at the mouth of the Mississippi River; and the whole of the hereinbefore-recited act, approved March third, anno Domini eighteen hundred and seventy-five, except as the same is hereby expressly modified or amended; or has by act heretofore passed been modified or amended, shall be and remain in full force, and have the same effect as if this act had not been passed.

Approved, March 3, 1879.

May 13, 1879.
Vol. 21, p. 4.

CHAP. 6.—An Act Making appropriations for constructing jetties and other works at South Pass, Mississippi River.

Appropriation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

Eads jetties.

the requisite amount is hereby appropriated out of any money in the Treasury not otherwise appropriated, to enable the Secretary of War to cause to be paid all money that may become due and owing to James B. Eads and his associates, or that may become payable to said Eads, his assigns or legal representatives, in accordance

1875, c. 134, 18
Stat., 463.

with the provisions of the act approved March third, eighteen hundred and seventy-five, and the acts amendatory thereof, and to continue the monthly payments in the manner and to the full extent of the amount specified in the act approved June nineteenth, eighteen hundred and seventy-eight, chapter three hundred and thirteen, Statutes at Large: *Provided*, That nothing herein contained shall be held or construed as waiving or impairing any right which the United States may have under the original act hereinbefore referred to or the several acts amendatory thereof: *And provided further*, That nothing in this act shall be construed as making an appropriation for the payment of the one million of dollars which by the provisions of the act of March third, eighteen hundred and seventy-five are to remain as security in the possession of the United States and only to become payable, one-half at the end of ten years and the residue at the end of twenty years after the completion of the work provided for in said acts as ascertained and determined by the Secretary of War.

1878, c. 313, 20
Stat., 168.

Proviso.

Proviso.
Reserve not
appropriated.

be held or construed as waiving or impairing any right which the United States may have under the original act hereinbefore referred to or the several acts amendatory thereof: *And provided further*, That nothing in this act shall be construed as making an appropriation for the payment of the one million of dollars which by the provisions of the act of March third, eighteen hundred and seventy-five are to remain as security in the possession of the United States and only to become payable, one-half at the end of ten years and the residue at the end of twenty years after the completion of the work provided for in said acts as ascertained and determined by the Secretary of War.

Approved, May 13. 1879.

June 10, 1879.
Vol. 21, p. 8.

CHAP. 15.—An Act To amend an Act entitled "An Act making appropriations for the construction, repair, preservation, and completion of certain works on rivers and harbors and for other purposes," approved March third, eighteen hundred and seventy-nine.

River improve-
ments.
1879, c. 181, 20
Stat., 364, 370.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That

such parts of the moneys heretofore appropriated by the act of which this is amendatory for the improvement

of the Great Kanawha River in West Virginia and the Kentucky River in the State of Kentucky as may be necessary in the prosecution of said improvements as undertaken may be expended in the purchase, voluntary or by condemnation as the case may be, of such sites as are necessary in the prosecution of said improvements: *Provided*, That such expenditure shall be under the direction of the Secretary of War: *And provided further*, That if the owners of such lands or sites shall refuse to sell the same at reasonable prices, then the prices to be paid shall be determined and the title and jurisdiction procured in the manner prescribed by the laws of the State in which such lands or sites are situated.

Kanawha River.
Kentucky River.
Purchase of land.

Proviso.

Condemnation.

Approved, June 10, 1879.

CHAP. 22.—An Act To correct an error in “An Act making appropriations for the construction, repair, preservation, and completion of certain works on rivers and harbors, and for other purposes” approved March third, eighteen hundred and seventy-nine.

June 14, 1879.
Vol. 21, p. 20.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That so much of the act entitled “An act making appropriations for the construction, repair, preservation, and completion of certain works on rivers and harbors, and for other purposes,” approved March third, eighteen hundred and seventy-nine, as, provides for the survey of “Chattahoochee” River, between Geneva and Newton, in Alabama, be, and the same is hereby, corrected so as to read, “Choctawhatchee” River, Alabama, from Geneva to Newton.

Improvement
of Choctaw-
hatchee River.
1879, c. 181, 20
Stat., 374.

Approved, June 14, 1879.

CHAP. 32.—An Act To authorize the Secretary of War to use certain moneys appropriated by Act of Congress approved March third, eighteen hundred and seventy-nine, “for the protection of the high sand-banks on the Chippewa River,” in the completion and protection of improvements in and near the mouth of said Chippewa River.

June 19, 1879.
Vol. 21, p. 23.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That the Secretary of War be, and he is hereby, authorized, in his discretion, to apply and use for the completion and protection of the wing-dams, jetties, and other improvements of the Chippewa River in the State of Wisconsin, located at and near the mouth of said river, so much of the moneys appropriated by an act of Congress approved March third, eighteen hundred and seventy-nine, entitled “An act making appropriations for the construction, repair, preservation, and completion of certain works on rivers and harbors, and for other purposes,” as were appropriated “for the protection of the high sand banks on the Chippewa River,” and so forth, as may be required for such purpose herein provided; *Provided*, That such use or application of the

Chippewa River, Wis.
1879, c. 181, 20
Stat., 372.

Use of appropriation.

Proviso.

moneys herein authorized shall be made under the same limitations and conditions as provided in the act hereinbefore named, and subject to the terms and conditions of the proviso attached to said appropriation for said Chippewa River in said act approved, March third, eighteen hundred and seventy-nine.

Approved, June 19, 1879.

June 28, 1879.
Vol. 21, p. 37.

CHAP. 43.—An Act To provide for the appointment of a "Mississippi River Commission" for the improvement of said river from the Head of the Passes near its mouth to its headwaters.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That a commission is hereby created, to be called "The Mississippi River Commission," to consist of seven members^[a].

SEC. 2. The President of the United States shall, by and with the advice and consent of the Senate, appoint seven commissioners, three of whom shall be selected from the Engineer Corps of the Army, one from the Coast and Geodetic Survey, and three from civil life, two of whom shall be civil engineers. And any vacancy which may occur in the commission shall in like manner be filled by the President of the United States; and he shall designate one of the commissioners appointed from the Engineer Corps of the Army to be president of the commission. The commissioners appointed from the Engineer Corps of the Army and the Coast and Geodetic Survey shall receive no other pay or compensation than is now allowed them by law, and the other three commissioners shall receive as pay and compensation for their services each the sum of three thousand dollars per annum; and the commissioners appointed under this act shall remain in office subject to removal by the President of the United States.

SEC. 3. It shall be the duty of said commission to direct and complete such surveys of said river, between the Head of the Passes near its mouth to its headwaters as may now be in progress, and to make such additional surveys, examinations, and investigations, topographical, hydrographical, and hydrometrical, of said river and its tributaries, as may be deemed necessary by said commission to carry out the objects of this act. And to enable said commission to complete such surveys, examinations, and investigations, the Secretary of War shall, when requested by said commission, detail from the Engineer Corps of the Army such officers and men as may be necessary, and shall place in the charge and for the use of said commission such vessel or vessels and such machinery and instruments as may be

Mississippi River
Commission.
Vol. 31, p. 792.
Post, p. 936.

Number.

Selection.

Vacancies.

President.

Compensation.

Tenure of office.

Duties.

Detail of as-
sistants, etc.

^a Act approved February 18, 1901, amends this act by adding thereto a section providing that the headquarters and general offices of the Commission shall be located at some town on the river, etc.

under his control and may be deemed necessary. And the Secretary of the Treasury shall, when requested by said commission, in like manner detail from the Coast and Geodetic Survey such officers and men as may be necessary, and shall place in the charge and for the use of said commission such vessel or vessels and such machinery and instruments as may be under his control and may be deemed necessary. And the said commission may, with the approval of the Secretary of War, employ such additional force and assistants, and provide, by purchase or otherwise, such vessels or boats and such instruments and means as may be deemed necessary. Additional force.

SEC. 4. It shall be the duty of said commission to take into consideration and mature such plan or plans and estimates as will correct, permanently locate, and deepen the channel and protect the banks of the Mississippi River; improve and give safety and ease to the navigation thereof; prevent destructive floods; promote and facilitate commerce, trade, and the postal service; and when so prepared and matured, to submit to the Secretary of War a full and detailed report of their proceedings and actions, and of such plans, with estimates of the cost thereof, for the purposes aforesaid, to be by him transmitted to Congress: *Provided*, That the commission shall report in full upon the practicability, feasibility, and probable cost of the various plans known as the jetty system, the levee system, and the outlet system, as well as upon such others as they deem necessary. Duties. Report. Proviso.

SEC. 5. The said commission may, prior to the completion of all the surveys and examinations contemplated by this act, prepare and submit to the Secretary of War plans, specifications, and estimates of costs for such immediate works as, in the judgment of said commission, may constitute a part of the general system of works herein contemplated, to be by him transmitted to Congress. Immediate works.

SEC. 6. The Secretary of War may detail from the Engineer Corps of the Army of the United States an officer to act as secretary of said commission. Secretary.

SEC. 7. The Secretary of War is hereby authorized to expend the sum of one hundred and seventy-five thousand dollars, or so much thereof as may be necessary, for the payment of the salaries herein provided for, and of the necessary expenses incurred in the completion of such surveys as may now be in progress, and of such additional surveys, examinations, and investigations as may be deemed necessary, reporting the plans and estimates, and the plans, specifications, and estimates contemplated by this act, as herein provided for; and said sum is hereby appropriated for said purposes out of any money in the Treasury not otherwise appropriated. Appropriation.

Approved, June 28, 1879.

June 28, 1879.
Vol. 21, p. 54.

[No. 19.] Joint Resolution Authorizing a survey of the Mississippi River near Lake Concordia, Louisiana, and Cowpen Bend, Mississippi.

Examination
and survey of
Mississippi Riv-
er.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be and he is hereby authorized and directed to order a survey and recommendations thereon of the Mississippi River near Lake Concordia, Louisiana, and of Cowpen Bend, Mississippi, looking to the protection of the harbors of Natchez and Vidalia by restraining the river from cutting into Lake Concordia, and of the Charenton Canal in St. Mary's Parish, Louisiana, out of moneys already appropriated for surveys and examinations by act of Congress of March third, eighteen hundred and seventy-nine.

Approved, June 28, 1879.

Jan. 23, 1880.
Vol. 21, p. 61.

CHAP. 10.—An Act Directing the removal of obstructions from the harbor at the Delaware Breakwater.

Removal of ob-
structions in har-
bor at Delaware
Breakwater.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and he is hereby, directed to cause to be removed from the harbor at the Delaware Breakwater and the entrance thereto and in the main ship channel of the Delaware Bay and River several vessels which were sunk in the year eighteen hundred and seventy-seven, and now forming obstructions endangering the safety of vessels entering said harbor after reasonable notice to the owners of such vessels to remove the same, and the sum of twenty-five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for that purpose, out of any money in the Treasury not otherwise appropriated.

Notice.

Appropriation.

Approved, January 23, 1880.

May 18, 1880.
Vol. 21, p. 141.

CHAP. 95.—An Act To abolish all tolls at the Louisville and Portland Canal.

Tolls at Louis-
ville and Port-
land Canal abol-
ished.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That after the first day of July, eighteen hundred and eighty, no tolls shall be charged or collected at the Louisville and Portland Canal, but the Secretary of War shall be authorized to draw his warrant from time to time upon the Secretary of the Treasury to pay the actual expenses of operating and keeping said canal in repair^a.

Approved, May 18, 1880.

^a The Treasury Department has decided that this act does not appropriate money for operating and caring for the canal.

CHAP. 211.—An Act Making appropriations for the construction, repair, completion, and preservation of certain works on rivers and harbors, and for other purposes.

June 14, 1880.

Vol. 21, p. 180.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be expended, under the direction of the Secretary of War, for the construction, repair, completion, and preservation of the public works hereinafter named:

Improving the gut^a opposite Bath, Maine: Continuing improvement, seven thousand dollars.

Public works on rivers and harbors.

Appropriations.

Harbors in States of: Maine.

Improving harbor at Belfast, Maine: Continuing operations, three thousand dollars.

Improving Richmond Island Harbor, Maine; Continuing operations, three thousand dollars.

For the completion of the improvement of Lubec Channel, Maine, twenty thousand dollars.

Improving harbor at Portsmouth, New Hampshire: Continuing improvement, twenty-five thousand dollars.

New Hampshire.

Improving harbor at Burlington, Vermont: Continuing improvement, ten thousand dollars.

Vermont.

Improving harbor at Swanton, Vermont: Continuing improvement, two thousand five hundred dollars.

Improving harbor at Plymouth, Massachusetts: Continuing operations, ten thousand dollars.

Massachusetts.

Improving harbor at Provincetown, Massachusetts: Maintenance and annual repairs, five hundred dollars.

Improving harbor at Bridgeport, Connecticut: Continuing improvement, ten thousand dollars.

Connecticut.

Improving Nantucket Harbor, Massachusetts, fifty thousand dollars.

Improving harbor at Milford, Connecticut: Continuing improvement, five thousand dollars.

Improving harbor at New Haven, Connecticut: Continuing improvement, fifteen thousand dollars.

Improving harbor at Norwalk, Connecticut: Continuing improvement, five thousand dollars; and so much of said appropriation as shall be necessary therefor shall be so expended as to have the channel six feet deep at low water between the steamboat landing in said Norwalk and Long Island Sound.

Improving harbor of Southport, Connecticut: Continuing improvement, two thousand five hundred dollars.

Improving harbor at Buffalo, New York: Continuing improvement, ninety thousand dollars.

New York.

Improving harbor at Charlotte, New York: Repair of piers, five thousand dollars.

Improving harbor at Dunkirk, New York: Continuing improvement, ten thousand dollars.

^a The Gut is a part of the Sasanoa (or Back) River.

Improving Echo Harbor, New Rochelle, New York: Continuing improvement, three thousand dollars.

Improving harbor at Great Sodus Bay, New York: Continuing operations, three thousand dollars.

Improving harbor at Little Sodus Bay, New York: Continuing operations, twenty thousand dollars.

Oak Orchard Harbor. Improving harbor at Oak Orchard, New York: Continuing operations, five hundred dollars.

Cathance River, Me. Improving Cathance River, Maine, ten thousand dollars.

New York. Improving harbor at Oswego, New York: Continuing improvement, ninety thousand dollars.

Improving harbor at Plattsburg, New York: For dredging, one thousand dollars.

Improving harbor at Port Jefferson, Long Island Sound, New York: Continuing operations, three thousand dollars.

Improving harbor at Pultneyville, New York: Continuing operations, three thousand dollars.

Erie Harbor, Pa. Improving harbor at Erie, Pennsylvania: Continuing improvement, twenty-five thousand dollars.

Delaware pier. Constructing pier in Delaware Bay, near Lewes, Delaware: Continuing operations, ten thousand dollars.

Piers of ice-harbor at New Castle, Delaware: Continuing operations, three thousand dollars.

Wilmington Harbor. Improving harbor at Wilmington, Delaware: To dredge the bar and channel at the mouth of the Christiana River, and make such survey as may be necessary to determine the site of such works as may be necessary for the permanent improvement of said river: Continuing operations, ten thousand dollars.

Maryland. Improving harbor at Baltimore, Maryland: Continuing operations, one hundred thousand dollars.

Improving Breton Bay, Leonardtown, Maryland: Continuing improvement, three thousand dollars.

Dist. Columbia. Improving the harbors and channels at Washington and Georgetown, District of Columbia: Continuing the improvements, including the removal of rocks, forty thousand dollars.

Virginia. Improving harbor at Norfolk, Virginia, and its approaches: Continuing improvement, fifty thousand dollars.

Improving harbor at Onancock, Virginia: Continuing improvement, five thousand dollars.

South Carolina. Improving harbor at Charleston, South Carolina: Continuing improvement, one hundred and seventy thousand dollars.

Georgia. Improving harbor at Savannah and Savannah River, Georgia: Continuing improvement, sixty-five thousand dollars.

Improving harbor at Brunswick, Georgia: Continuing improvement, ten thousand dollars.

Florida. Improving harbor at Cedar Keys, Florida: Continuing improvement, fifteen thousand dollars.

Improving harbor at Pensacola, Florida: Continuing improvement, forty thousand dollars.

- Improving harbor at Mobile, Alabama: Continuing improvement, one hundred and twenty-five thousand dollars. Alabama.
- Improving Mississippi River at and near Vicksburg, and protection of harbor at Vicksburg, Mississippi: Continuing improvement, twenty thousand dollars. Mississippi River at Vicksburg.
- Improving harbor at New Orleans, Louisiana: Continuing improvement, seventy-five thousand dollars. Louisiana.
- Improving outer bar, Galveston Harbor, Texas: Continuing operations, one hundred and seventy-five thousand dollars. Texas.
- Improving harbor at Ashtabula, Ohio: Continuing operations, twenty thousand dollars. Ohio.
- Improving harbor at Black River, Ohio: Continuing operations, one thousand dollars. Black River (Lorain).
- Improving harbor at Cleveland, Ohio: Continuing improvement, one hundred and twenty-five thousand dollars.
- Improving harbor at Conneaut, Ohio: Continuing operations, six thousand dollars.
- Improving harbor at Fairport, Ohio: Continuing operations, three thousand dollars.
- Improving harbor at Huron, Ohio: Continuing operations, three thousand dollars.
- Ice-harbor at mouth of Muskingum River, Ohio: Continuing operations fifty thousand dollars. Ice harbor, Muskingum River.
- Improving harbor at Port Clinton, Ohio: Continuing operations, five thousand dollars.
- Improving and surveying harbor at Sandusky City, Ohio: Continuing operations, twelve thousand five hundred dollars.
- Improving harbor to the depth of sixteen feet at Toledo, Ohio: Continuing operations, thirty thousand dollars. Toledo Harbor, Ohio.
- Improving harbor at Vermillion, Ohio: Continuing operations, two thousand dollars.
- Improving outside harbor at Michigan City, Indiana: Continuing operations, forty thousand dollars; to be used and expended in improving the inner harbor, the additional sum of fifteen thousand dollars. Indiana.
- Improving harbor at Calumet, Illinois: Continuing improvement, twenty thousand dollars. Illinois.
- Improving outside harbor at Chicago, Illinois: Continuing improvement, including commencement of construction of exterior breakwater, one hundred and forty-five thousand dollars.
- Improving Galena River and Harbor, Illinois: Continuing improvement, twelve thousand dollars. Galena River.
- Improving harbor and the Mississippi River at Memphis, Tennessee: Continuing improvement, fifteen thousand dollars. Mississippi River at Memphis.
- Improving harbor and river at Au Sable, Michigan: Continuing operations, seven thousand dollars. Michigan.
- Improving harbor at Black Lake, Michigan: Continuing operations, six thousand dollars. Black Lake (Holland).
- Improving harbor at Charlevoix, Michigan: Continuing improvement, ten thousand dollars.

Massachusetts.

Improving harbor at Boston, Massachusetts, seventy-five thousand dollars; of which sum thirty thousand dollars shall be expended in the said harbor; twenty-two thousand five hundred dollars at the mouth of Charles River in said harbor and up to Watertown; seventeen thousand five hundred dollars in said harbor at mouth of Mystic River, and five thousand dollars from said harbor to Nantasket Beach.

Michigan.

Improving harbor at Cheboygan, Michigan: Continuing operations, six thousand dollars.

Improving harbor at Grand Haven, Michigan: Continuing operations, fifty thousand dollars.

Sand beach
(Harbor Beach).

Harbor of refuge at Lake Huron: Continuing operations, seventy-five thousand dollars.

Improving harbor at Ludington, Michigan: Continuing operations, eight thousand dollars.

Improving harbor at Manistee, Michigan: Continuing improvement, ten thousand dollars.

Improving harbor at Marquette, Michigan: For repairs of existing work one thousand dollars.

Improving harbor at Monroe, Michigan: Continuing operations, two thousand dollars.

Improving Manistique Harbor, Michigan, five thousand dollars.

Improving harbor at Muskegon, Michigan: Continuing operations, seven thousand five hundred dollars.

Improving harbor at Ontonagon, Michigan: Continuing improvement, fifteen thousand dollars; of which sum two thousand dollars shall be expended in dredging.

Improving harbor at Pentwater, Michigan: Continuing operations, four thousand dollars.

Harbor of refuge at Portage Lake, Lake Michigan: Continuing operations, ten thousand dollars.

Improving river and harbor at Saint Joseph, Michigan, including channel leading up to Benton Harbor: Continuing operations, eight thousand dollars.

Improving harbor at Saugatuck, Michigan: Continuing improvement, five thousand dollars.

Improving harbor at South Haven, Michigan: Continuing improvement, five thousand dollars.

Improving harbor at White River, Michigan: Continuing operations, five thousand dollars.

Wisconsin.

Improving harbor at Ahnapee, Wisconsin: Continuing improvement, seven thousand dollars.

Improving harbor at Green Bay, Wisconsin: Continuing improvement, six thousand dollars.

Improving harbor at Kenosha, Wisconsin: Continuing improvement, five thousand dollars.

Improving harbor at Manitowoc, Wisconsin: Continuing operations, seven thousand dollars.

Improving harbor at Menomonee, Wisconsin: Continuing improvement, ten thousand dollars.

Milwaukee
Harbor.

Improving harbor at Milwaukee, Wisconsin: Continuing operations, ten thousand dollars.

Improving harbor at Port Washington, Wisconsin: Continuing improvement, twenty thousand dollars.

Improving harbor at Racine, Wisconsin: Continuing operations, six thousand dollars.

Improving harbor at Sheboygan, Wisconsin: Repairs and dredging, seven thousand dollars.

Improving Superior Bay, Wisconsin: Dredging for improvement of natural entrance, and for repairing existing works, five thousand dollars.

Harbor of refuge at entrance of Sturgeon Bay Canal, Wisconsin: Continuing improvement, ten thousand dollars: *Provided*, That said sum shall not be expended until any private or corporate right which may exist to impose charges for the use of said harbor shall have been relinquished in manner satisfactory to the Secretary of War.

Proviso.

Improving harbor at Two Rivers, Wisconsin: Continuing improvement, twenty thousand dollars.

Improving Rush Chute and harbor of Burlington, Iowa: Continuing operations, five thousand dollars.

Iowa.

Improving harbor at Muscatine, Iowa: Continuing the improvement, seven thousand five hundred dollars.

Improving harbor at Duluth, Minnesota: Continuing the improvement, twenty-five thousand dollars.

Minnesota.

Improving harbor at Grand Marais, Minnesota: Continuing the improvement, ten thousand dollars.

Improving Kennebunk River, Maine: Continuing operations, two thousand dollars.

*Rivers.
Kennebunk.*

For improving Exeter River, in the State of New Hampshire, twenty thousand dollars.

Exeter.

Improving Otter Creek, Vermont: Continuing improvement, two thousand dollars.

Otter Creek.

Improving harbor at Newburyport, Massachusetts, fifty thousand dollars.

Improving Merrimac River, Massachusetts: Continuing operations, twelve thousand dollars.

Merrimac.

Improving Providence River and Narragansett Bay, Rhode Island: Continuing improvement, sixty thousand dollars.

Providence.

Improving Little Narragansett Bay, Rhode Island: Continuing improvement, five thousand dollars.

Improving Connecticut River, below Hartford, Connecticut: Continuing improvement, ten thousand dollars.

Connecticut.

Improving Housatonic River, Connecticut: Continuing improvement, two thousand dollars.

Housatonic.

Constructing breakwater at New Haven, Connecticut: Continuing operations, thirty thousand dollars.

Improving Thames River, Connecticut: Continuing improvement, twenty-five thousand dollars; of which sum, two thousand five hundred dollars shall be expended in the removal of rocks and sand from New London Harbor.

Thames.

Removing obstructions in East River and Hell Gate, New York: Continuing improvement, two hundred thousand dollars.

*East River and
Hell Gate.*

East Chester Creek.	Improving East Chester Creek, New York: Continuing improvement, three thousand five hundred dollars.
Hudson.	Improving Hudson River, New York: Continuing operations, twenty thousand dollars.
Cohansey Creek.	Improving Cohansey Creek, New Jersey: Continuing improvement, four thousand five hundred dollars.
Elizabeth.	Improving Elizabeth River, New Jersey: Continuing improvement, seven thousand five hundred dollars.
Manasquan.	Improving Manisquan River, New Jersey: Continuing improvement, twenty thousand dollars.
Passaic.	Improving Passaic River above Newark, New Jersey: Continuing improvement, two thousand dollars.
Rahway.	Improving Rahway River, New Jersey: Continuing improvement, ten thousand dollars.
Salem.	Improving Salem River, New Jersey: Continuing improvement, three thousand dollars.
Shrewsbury.	Improving Shrewsbury River, New Jersey: Continuing improvement, thirty thousand dollars.
Woodbridge Creek.	Improving Woodbridge Creek, New Jersey: Continuing improvement, five thousand dollars.
South.	Improving South River, Middlesex County, New Jersey, forty thousand dollars.
	Improving harbor at Frankfort, Michigan, five thousand dollars, to be expended in extending piers or dredging, at discretion of Secretary of War.
Allegheny.	Improving navigation of Allegheny River from mouth of French Creek to Pittsburgh, Pennsylvania: Continuing operations, twenty thousand dollars.
Schuylkill.	Improving Schuylkill River, Pennsylvania: Continuing improvement, forty thousand dollars.
Delaware.	Improving Delaware River, below Bridesburg, Pennsylvania: Continuing improvement, eighty-five thousand dollars; of which sum forty thousand dollars shall be expended at or near Petty's Island, between said island and Philadelphia, and ten thousand dollars at or near Smith's Island, between Philadelphia and Camden, through the sand-spit.
	Improving Delaware River, between Trenton, New Jersey, and Bridesburg, Pennsylvania: Continuing operations, ten thousand dollars.
	Improving Delaware River at Schooner Ledge: Continuing improvement, forty thousand dollars.
	Improving Delaware River, near Cherry Island Flats: Continuing improvement one hundred thousand dollars.
Mispillion Creek.	Improving Mispillion Creek, Delaware: Continuing improvement, four thousand dollars.
Wicomico.	Improving Wicomico River ^a , Maryland, below Salisbury: Continuing operations, five thousand dollars.
Annapolis Harbor.	Improving harbor at Annapolis, Maryland, five thousand dollars.
Potomac.	Dredging a channel in the Potomac River, through the flats in front of Mount Vernon, Virginia: Continuing operations, three thousand dollars.

^a On the eastern shore.

- Improving Appomattox River, Virginia: Continuing improvement, twenty thousand dollars. Appomattox.
- Improving Blackwater River, Virginia: Continuing operations, three thousand five hundred dollars. Blackwater.
- Improving Chickahominy River, Virginia: Continuing operations, two thousand dollars. Chickahominy.
- Improving James River, Virginia: Continuing improvement, seventy-five thousand dollars. James.
- Improving New River, from mouth of Wilson, in Grayson County, Virginia, to mouth of Greenbrier River, twenty-four thousand dollars; of which sum twelve thousand dollars shall be expended in the continuation of the work from the mouth of Greenbrier, up; seven thousand dollars in the continuation of the work formerly prosecuted on the river in Wythe County, and five thousand dollars between the lead mines in Wythe County and the mouth of Wilson, in Grayson County. New.
- Improving Raritan River, New Jersey, one hundred thousand dollars; of which sum seventy thousand dollars shall be expended in the removal of rocks at Whitehead's sand-dock, and thirty thousand dollars for dredging the shoals at the Middle Ground. Raritan.
- Improving mouth of Nomoni Creek, Virginia: Continuing operations, five thousand dollars. Nomini Creek.
- Improving North Landing River, Virginia and North Carolina: Continuing improvement, fifteen thousand dollars. North Landing.
- Improving Rappahannock River, Virginia: Continuing improvement, twenty-five thousand dollars. Rappahannock.
- Improving Staunton River, Virginia: Continuing improvement, seven thousand five hundred dollars. Staunton.
- Improving Urbana Creek, Virginia: Continuing improvement, two thousand five hundred dollars. Urbana Creek.
- Improving Great Kanawha River and operation of works, West Virginia: Continuing improvement, two hundred thousand dollars. Kanawha.
- Improving Guyandotte River, West Virginia: Continuing improvement, two thousand dollars. Guyandot.
- Improving Cape Fear River, North Carolina: Continuing improvement, seventy thousand dollars. Cape Fear.
- Continuing improvement of Currituck Sound, Coanajok Bay, and North River Bar, North Carolina: Continuing improvement, twenty-five thousand dollars. Currituck Sound, North River bar.
- Improving French Broad River, North Carolina: Continuing improvement, three thousand dollars. French Broad River.
- Improving Neuse River, North Carolina, from its mouth to the head of navigation: Continuing improvement, forty-five thousand dollars. Neuse.
- Improving Pamlico and Tar Rivers, North Carolina: Continuing operations, nine thousand dollars. Pamlico and Tar rivers.
- Improving Scuppernong River, North Carolina: Continuing improvement, one thousand dollars. Scuppernong.
- Improving Trent River, North Carolina: Continuing improvement, ten thousand dollars. Trent.

- Chattahoochee. Improving Chattahoochee River, Georgia: Continuing improvement, twenty thousand dollars.
- Coosa. Improving Coosa River, Georgia and Alabama: Continuing improvement, seventy-five thousand dollars.
- Flint. Improving Flint River, Georgia: Continuing improvement, twenty thousand dollars; of which sum ten thousand dollars shall be expended below Albany, and ten thousand dollars between Albany and Montezuma.
- Ocmulgee. Improving Ocmulgee River, Georgia: Continuing operations, seven thousand dollars.
- Oconee. Improving Oconee River, Georgia: Continuing operations, one thousand and five hundred dollars.
- Oostenaula and Coosawattee. Improving Oostenaula and Coosawattee Rivers, Georgia: Continuing operations, two thousand dollars.
- Apalachicola. Improving Apalachicola River, Florida: Continuing improvement, two thousand dollars.
- Improving Apalachicola Bay, Florida, ten thousand dollars.
- Choctawhatchee. Improving Choctawhatchee River, Florida and Alabama up to Newton: Continuing operations, seven thousand dollars.
- Passage between Fernandina and St. Johns. Improving inside passage between Fernandina and Saint John's, Florida: Continuing improvement, at such point as may be selected by the chief engineer, and approved by the Secretary of War, seven thousand dollars.
- Alabama. Improving Alabama River, Alabama: Continuing improvement, twenty-five thousand dollars.
- Warrior and Tombigbee. Improving Warrior and Tombigbee Rivers, Alabama and Mississippi, forty-seven thousand dollars; of which sum twenty thousand dollars shall be expended on the Warrior, twelve thousand dollars on the Tombigbee between Columbus and Vienna, and fifteen thousand dollars on the Tombigbee below Vienna.
- Improving Tombigbee River above Columbus, Mississippi: Continuing improvement, four thousand dollars.
- Big Sunflower. Improving Big Sunflower River Mississippi: Continuing improvement, eight thousand dollars.
- Coldwater. Improving Coldwater River, Mississippi: Continuing improvement, four thousand dollars.
- Pascagoula. Improving Pascagoula River, Mississippi: Continuing improvement, twenty thousand dollars.
- Pearl. Improving Pearl River, Mississippi, from Jackson to Carthage: Continuing improvement, seven thousand five hundred dollars.
- Yazoo. Improving Yazoo River, Mississippi: Continuing improvement, twelve thousand dollars.
- Bayou La Fourche. Improving Bayou La Fourche, Louisiana: Continuing improvement, five thousand dollars.
- Red River. Removing obstructions from Red River, Louisiana: Continuing operations, including construction of snag-boat, sixty thousand dollars.
- Tones Bayou. Removing raft in Red River and closing Tone's Bayou, Louisiana: Continuing operations, twenty five thousand dollars.

- Improving Tallahatchee River, Mississippi: Continuing improvement, nine thousand dollars, of which sum four thousand dollars shall be expended below Coldwater and five thousand dollars between the mouth of Coldwater and Batesville. Tallahatchie.
- Improving Aransas Pass and Bay, up to Rockport and Corpus Christi, Texas: Continuing improvement, sixty-five thousand dollars. Aransas Pass and Bay.
- Improving Neches River, Texas: Continuing operations, five thousand dollars. Neches.
- Improving Pass Cavallo Inlet into Matagorda Bay, Texas: Continuing improvement, fifty thousand dollars. Pass Cavallo Inlet.
- Improving ship-channel, Galveston Bay: Continuing improvement, fifty thousand dollars. Galveston Bay.
- Improving Sheepshead Bay, New York, three thousand dollars. Sheepshead Bay.
- Improving Canarsie Bay, New York, ten thousand dollars. Canarsie Bay.
- Improving Nottoway River, Virginia, five thousand dollars. Nottoway River.
- Improving Rockland Harbor, Maine, twenty thousand dollars. Rockland Harbor, Me.
- Improving Flushing Bay, New York, fifteen thousand dollars: *Provided*, That in the judgment of the engineer in charge this expenditure can be made without serious detriment to property interests on the Newtown side. Flushing Bay. *Provido*.
- Improving Narrows of Sabine River, above Orange, Texas, and to deepen channel at its mouth: Continuing improvement, five thousand dollars. Sabine River.
- Improving Sabine Pass and Blue Buck Bar, Texas: Continuing improvement, fifty thousand dollars. Sabine Pass.
- Improving Trinity River, Texas: Continuing operations, four thousand dollars. Trinity.
- Improving Arkansas River between Fort Smith, Arkansas, and Wichita, Kansas: Continuing the improvement, fifteen thousand dollars. Arkansas.
- Improving Fourche Le Fevre River, Arkansas: Continuing improvement, four thousand dollars. Fourche Le Fevre.
- Improving L'Anguille River, Arkansas: Continuing improvement, two thousand dollars. L'Anguille.
- Improving Ouachita River, Arkansas and Louisiana: Continuing improvement, eight thousand dollars. Ouachita.
- Improving White and Saint Francis Rivers, Arkansas: Continuing improvement, twelve thousand dollars. White and St. Francis.
- Improving Cumberland River, above Nashville, Tennessee, as follows: From Nashville to Kentucky line, fifteen thousand dollars; from Kentucky line to Smith's Shoals, ten thousand dollars; at Smith's Shoals, twenty thousand dollars. Cumberland.
- Improving Cumberland River, below Nashville, Tennessee: Continuing improvement, twenty thousand dollars.
- Improving Hiwassee River, Tennessee: Continuing operations, three thousand dollars. Hiwassee.

Tennessee.

Improving Tennessee River, above Chattanooga: Continuing the improvement, ten thousand dollars.

Improving Tennessee River, below Chattanooga, including Muscle Shoals, Duck River Shoal, and shoal at Reynoldsburg: Continuing operations, three hundred thousand dollars.

Big Sandy.

Improving Big Sandy River, from Catlettsburg, Kentucky, to head of navigation, fifty-five thousand dollars; of which sum fifty thousand dollars shall be expended in the construction of works at Louisa, according to the recommendations of William E. Merrill, Major of Engineers, in his annual report, dated August twelfth, eighteen hundred and seventy-nine, and five thousand dollars in the further improvement of the upper river.

Kentucky.

Improving Kentucky River from its mouth to Three Forks: Continuing operations, one hundred thousand dollars.

Ohio.

Improving Ohio River: Continuing the improvement, two hundred and fifty thousand dollars; of which sum one hundred thousand dollars shall be expended on Davis Island Dam, and one hundred and fifty thousand dollars on the river from its mouth to its head: *Provided*, That ten thousand dollars of the last named sum may, in the discretion of the engineers, be expended on Indiana Chute: *And provided further*, That twenty-five thousand dollars of the sum for the improvement of the Ohio River shall be applied to continuing the improvement at Grand Chain on said river.

Wabash.

Improving Wabash River, Indiana: Continuing improvement, twenty-five thousand dollars.

Sandusky.

Improving Sandusky River, Ohio: Continuing improvement, ten thousand dollars.

White.

Improving White River, Indiana, from Wabash River to Portersville, and to the falls on West Fork: Continuing operations, twenty thousand dollars.

Illinois.

Improving Illinois River: Continuing improvement, one hundred and ten thousand dollars, of which sum one hundred thousand dollars shall be expended on locks and dams and ten thousand dollars for dredging.

Mississippi,
Missouri, and
Arkansas.

Improving Mississippi, Missouri, and Arkansas Rivers: Removing snags, wrecks, and other obstructions, two hundred thousand dollars; of which sum one hundred thousand dollars shall be expended on the Mississippi River, sixty-five thousand dollars on the Missouri, and thirty-five thousand dollars on the Arkansas.

Mississippi.

Improving Mississippi River, between the mouths of the Illinois and Ohio Rivers: Continuing improvement, two hundred and fifty thousand dollars; of which sum twenty thousand dollars shall be expended at Kaskaskia Bend, and fifteen thousand dollars may be expended on the harbor at Alton.

Harbor at Alton.

Cuivre.

Improving Cuivre River, from mouth to Chain of Rocks, and removing snags and obstructions, two thousand dollars.

Improving Mississippi River, above the Falls of Saint Anthony: Continuing improvement, fifteen thousand dollars.

Mississippi.

Improving Mississippi River, from Saint Paul to Des Moines Rapids: Continuing improvement, one hundred and fifty thousand dollars: *Provided*, That three thousand five hundred dollars of said sum may, in the discretion of the Chief of Engineers, be expended in closing the slough at the confluence of the Minnesota and Mississippi Rivers: *Provided further*, That three thousand dollars of the foregoing sum shall be used in dredging the western channel at or near Guttenberg, Iowa.

Proviso.

Proviso.

Improving Mississippi River, from Des Moines Rapids to mouth of Illinois River: Continuing improvement, one hundred thousand dollars.

Improving Mississippi River at Quincy, Illinois: Continuing improvement, twenty-five thousand dollars.

Removing bar in the Mississippi River, opposite Dubuque, Iowa: Continuing operations, seven thousand dollars.

Improving Rock Island Rapids, Mississippi River: Continuing improvement, eight thousand dollars.

Improving Des Moines Rapids: Continuing improvement, twenty thousand dollars.

Operating the canal at Des Moines Rapids: Continuing operations of the canal, thirty thousand dollars.

Operating canal at Des Moines Rapids.

Annual expense of gauging the waters of the Mississippi River and its tributaries: Continuing observations of the rise and fall of the river and its chief tributaries, as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars.

Annual expense of gauging the Mississippi. 1871, res. 40; 16 Stat., 598.

Improving Upper Mississippi River: Operating snag-boat, eight thousand dollars.

Upper Mississippi and operating snag boat.

Improving the Osage River, Kansas and Missouri: Continuing the improvement, thirty thousand dollars.

Osage River.

Improving Missouri River at Atchison, Kansas: Continuing operations, twenty thousand dollars.

Missouri.

Improving Missouri River at Cedar City: Continuing improvement, fifteen thousand dollars.

Improving the Missouri River at Council Bluffs, Iowa, and at Omaha, Nebraska: Continuing operations, twenty thousand dollars.

Improving the Missouri River at Eastport, Iowa, and at Nebraska City, Nebraska: Continuing operations, fourteen thousand dollars.

Improving the Missouri River at Brownville, ten thousand dollars.

Improving the Missouri River at Plattsmouth, ten thousand dollars.

Improving Missouri River at or near Fort Leavenworth: Continuing improvement, eight thousand dollars.

Improving Missouri River at or near Glasgow: Continuing improvement, twenty thousand dollars.

Improving Missouri River at and near Kansas City: Continuing improvement, twenty-five thousand dollars; which

sum may be expended on either side of the river, in the discretion of the engineer.

Improving Missouri River at and near Saint Joseph: Continuing operations, twenty thousand dollars.

Improving Missouri River at Sioux City, Iowa: Continuing operations, eight thousand dollars.

Improving Missouri River at Vermillion, Dakota: Continuing the improvement, ten thousand dollars.

Improving Missouri river, above mouth of the Yellowstone River: Continuing the improvement, twenty-five thousand dollars.

Detroit.

Improving Detroit River, Michigan: Continuing operations, fifty thousand dollars.

Saginaw.

Improving Saginaw River, Michigan: Continuing operations, fifteen thousand dollars; of which sum ten thousand dollars shall be expended for removal of bars at the lower end of the river and in deepening the channel from the mouth of the river out into the bay.

St. Clair flats.

Improving Saint Clair Flats, Michigan: Repairs of canal, two thousand five hundred dollars.

Chippewa River.

Improving the Chippewa River, Wisconsin: Continuing the improvement, ten thousand dollars; but this sum is appropriated subject to the same conditions and limitations imposed by section one of the act approved March third, eighteen hundred and seventy-nine, for the improvement of rivers and harbors, relating to said Chippewa River.

1879, c. 181; 20 Stat., 372.

Fox and Wisconsin rivers.

Improving Fox and Wisconsin Rivers, Wisconsin: Continuing improvement, one hundred and twenty-five thousand dollars; of which sum fifty thousand dollars shall be expended in continuing the improvement of the Wisconsin, and seventy-five thousand dollars for continuing the improvement of the Fox River; of which last sum three thousand dollars may, in the discretion of the engineers, be expended at the mouth of Fond du Lac.

Red River of the North.

Improving Red River of the North, Minnesota and Dakota: Continuing improvement, twenty thousand dollars.

St. Anthony's Falls.

Repairs and contingencies of public works at Saint Anthony's Falls, Minnesota: To meet repairs necessary, present and prospective, ten thousand dollars.

Upper Red River.

Improving Upper Red River, Arkansas, from Fulton to the head of the raft: Continuing improvement, ten thousand dollars.

St. Croix.

Improving Saint Croix River, below Taylor's Falls: Continuing improvement, ten thousand dollars, of which sum three hundred dollars, or so much thereof as in the opinion of the engineers in charge may be necessary, shall be expended in the improvement of the slough on the east side of said river, known as the canal between Four-Mile Island and the foot of the Saint Croix Boom.

Lower Clearwater.

Improving Lower Clearwater River, Idaho: Continuing operations, five thousand dollars.

Cascades of Columbia.

Constructing canal around Cascades of Columbia River: Continuing operations, one hundred thousand dollars.

Improving Upper Columbia River, including Snake River: Continuing improvement, fifteen thousand dollars. Upper Columbia and Snake.

Improving Upper Willamette and Yamhill Rivers: Continuing improvement, twelve thousand dollars. Upper Willamette and Yamhill.

Improving Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea, including the bar at the mouth of the Columbia River: Continuing improvement forty-five thousand dollars. Lower Willamette and Columbia.

Improving Sacramento River, California: Continuing improvement, forty-five thousand dollars. Sacramento.

Improving harbor at Wilmington, California: Continuing improvement, thirty-five thousand dollars. Wilmington Harbor, Cal.

Examinations and surveys of South Pass of Mississippi River: To ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at the South Pass of the Mississippi River, and to enable the Secretary of War to report during the maintenance of the work, twenty thousand dollars. Surveys, South Pass, Mississippi River.

Improving the channel of Susquehanna River above and below Havre de Grace, and to complete the work at the Fishing Battery light-station near Spesutia Island, twenty-eight thousand dollars. Susquehanna.

Improving and operating Saint Mary's River and Saint Mary's Falls Canal, two hundred and fifty thousand dollars. St. Marys River and canal.

And the Secretary of War is hereby authorized to accept on behalf of the United States from the State of Michigan the Saint Mary's Canal and the public works thereon: *Provided*, Such transfer shall be so made as to leave the United States free from any and all debts, claims, or liability of any character whatsoever, and said canal after such transfer shall be free for public use: *And provided further*, That after such transfer the Secretary of War be, and hereby is, authorized to draw from time to time his warrant on the Secretary of the Treasury to pay the actual expenses of operating and keeping said canal in repair. Acceptance of public works authorized. *Proviso.*

Improving Buttermilk Channel, New York, sixty thousand dollars. Buttermilk channel. *Proviso.*

Improving Ashley River, South Carolina, one thousand dollars. Ashley River.

Improvement of Elk River, Maryland, ten thousand dollars. Elk.

Improving Cheesequake's Creek, New Jersey, twenty thousand dollars. Cheesequake Creek.

Improving Vermillion River, Louisiana, five thousand dollars. Vermillion.

Improving Bayou Terrebonne, Louisiana, ten thousand dollars. Bayou Terrebonne.

Improving Bayou Teche, from Saint Martinsville to Port Barre, Louisiana, six thousand dollars. Bayou Teche.

Improving Bayou Courtableau, from Port Barre to Atchafalaya, Louisiana, seven thousand five hundred dollars. Bayou Courtableau.

Improving Susquehanna River, Pennsylvania, from Richards' Island up, fifteen thousand dollars. Susquehanna.

Grand Marais Harbor.	Construction of harbor of refuge at Grand Marais, Michigan, ten thousand dollars.
Pearl River.	Improving Pearl River below Jackson, Mississippi, thirty thousand dollars.
Yadkin.	Improving Yadkin River, North Carolina, twenty thousand dollars; six thousand dollars of which may be expended for the removal of dams.
White.	Improving White River above Buffalo Shoals, Arkansas, twenty thousand dollars.
St. Francis.	Improving Saint Francis River between Wilkesburg and Lester Landing, Arkansas, five thousand dollars.
White.	Improving White River between Jacksonport and Buffalo Shoals, Arkansas, five thousand dollars.
Passaic.	Improving Passaic River, New Jersey, from Pennsylvania Railroad bridge to its mouth, thirty thousand dollars.
Arkansas.	Improving Arkansas River at Pine Bluff, Arkansas, twenty-five thousand dollars.
Mississippi.	Improving Mississippi River at Natchez and Vidalia, forty thousand dollars.
Skagit.	Improving Skagit River, Washington Territory, two thousand five hundred dollars.
Amite.	Improving Amite River, Louisiana, eight thousand dollars.
Newtown Creek.	Improving Newtown Creek, New York, ten thousand dollars.
Pagan Creek.	Improving Pagan Creek, Virginia, five thousand dollars.
Scituate Harbor.	Improving Scituate Harbor, Massachusetts, seven thousand five hundred dollars.
Taunton River.	Improving Taunton River, Massachusetts, seventeen thousand five hundred dollars.
Block Island Harbor.	Improving Block Island Harbor, Rhode Island, six thousand dollars.
Stonington Harbor.	Improving Stonington Harbor, Connecticut twenty-five thousand dollars.
Broadkill River.	Improving Broadkill River, Delaware, five thousand dollars.
Smyrna River.	Improving the mouth of Duck Creek [Smyrna River], Delaware, five thousand dollars.
Broad Creek River.	Improving Broad Creek [Broad Creek River] from its mouth to Laurel, Delaware, five thousand dollars.
Northeast River.	Improving Northeast River, Maryland, five thousand five hundred dollars.
Tred Avon Creek.	Improving Treadhaven [Tred Avon] Creek, Maryland, for three miles below Easton, three thousand dollars.
Choptank River.	Improving Choptank River, between Denton and Greensboro, Maryland, five thousand dollars.
Warwick River.	Improving Secretary Creek [Warwick River], Maryland, three thousand dollars.
Dan River.	Improving Dan River, between Danville, Virginia, and Madison, North Carolina, ten thousand dollars.
Elk.	Improving Elk River, West Virginia, five thousand dollars.

Improving Escambia River, Florida and Alabama, eight thousand dollars.	Escambia.
Improving Suwannee River, Florida, five thousand dollars.	Suwanee.
Improving Tampa Bay, Florida, deepening the bar and channel from the bar to the town of Tampa, ten thousand dollars.	Tampa Bay.
Improving Tangipahoa River, Louisiana, five thousand dollars.	Tangipahoa.
Improving channel over bar at mouth of Brazos River, Texas, including a report upon the capacity of the harbor at the mouth of the Brazos and its adaptability as a harbor of refuge and naval station, forty thousand dollars.	Brazos.
Improving Saline River ^[a] , Arkansas, seven thousand five hundred dollars.	Saline River.
Survey of Missouri River, from its mouth to Sioux City, Iowa, thirty thousand dollars, of which sum five thousand dollars may be used, in the discretion of the Secretary of War, in protecting the work done on said river at or near Sioux City, Iowa.	Missouri River, survey authorized.
Improving Missouri River at Saint Charles, Missouri, twenty-five thousand dollars.	
Improving Mississippi River at and above the city of Alexandria, Missouri, ten thousand dollars.	Mississippi River.
Improving Caney Fork River, Tennessee, six thousand dollars.	Caney Fork River.
Improving Obed's [Obey] River, Tennessee, four thousand dollars.	Obey River.
Improving Monongahela River, West Virginia, at or near Laurel Run, according to plan recommended by engineer in charge, twenty-five thousand dollars.	Monongahela.
Improving Little Kanawha River, West Virginia, building additional lock and dam, fifteen thousand dollars.	Little Kanawha.
Improving Wilson Harbor, New York, ten thousand dollars.	Wilson Harbor.
Improving Waddington Harbor, New York, three thousand dollars.	Waddington Harbor.
Improving San Joaquin River, California, twenty thousand dollars.	San Joaquin River.
Improving Mattaponi River, Virginia, two thousand five hundred dollars.	Mattaponi.
Improving Petalumas Creek, California, eight thousand dollars.	Petaluma Creek.
Improving Cowlitz River, Washington Territory, two thousand dollars.	Cowlitz.
Improving Big Hatchie River, Tennessee, ten thousand dollars.	Hatchee.
Improving Mississippi River at or near Cape Girardeau and Minton's Point, Missouri, twenty thousand dollars.	Mississippi.
Improving Gasconade River Missouri, removing snags, five thousand dollars.	Gasconade.

^a A tributary of Ouachita River.

Black River.	Improving Black River, Arkansas fifteen thousand dollars.
Noxubee.	Improving Noxubee River, Mississippi, twelve thousand dollars.
Mississippi.	Improving Mississippi River at Hannibal, Missouri, twenty-five thousand dollars.
Winnepesaukee Lake.	Improving and surveying Winnipiseogee [Winnepesaukee] Lake, New Hampshire, five thousand dollars.
Duck River.	Improving Duck River, Tennessee, seven thousand dollars.
Waccamaw River.	Improving Waccemaw River, South Carolina, from the mouth up to Waccemaw Lake, North Carolina, fifteen thousand dollars.
Great Pedee.	Improving Great Pedee River, South Carolina, seven thousand dollars.
Totuskey River.	Improving Totusky River, Virginia, two thousand five hundred dollars.
York.	Improving York River at West Point, Virginia, ten thousand dollars.
Pamunkey.	Improving Pamunkey River, Virginia, two thousand five hundred dollars.
French Broad.	Improving French Broad River, Tennessee, between Knoxville and the mouth of Big Creek, ten thousand dollars.
Repairs of pier, Rocky River.	For repair of pier in Rocky River, Ohio, four thousand dollars.
Ice harbor, St. Louis. <i>Proviso.</i>	For ice-harbor at Saint Louis, Missouri, fifty thousand dollars: <i>Provided</i> , That no part of this sum shall be expended until a Board of Engineers shall have been convened and determined upon a plan for the construction of the work.
Rock Island Harbor.	Improving harbor at Rock Island, Illinois, six thousand dollars.
Marcushook ice harbor.	For ice-harbor at Marcus Hook, Pennsylvania, commencing enlargement of piers and dredging, thirty-five thousand dollars.
Shenandoah.	Improving Shenandoah River, West Virginia, fifteen thousand dollars.
Connecticut.	Improving Connecticut River, between Hartford and Holyoke, fifteen thousand dollars.
* * * * *	
Waukegan Harbor. <i>Proviso.</i>	For harbor at Waukegan, Illinois, fifteen thousand dollars: <i>Provided</i> , That this sum shall not be expended until a Board of three engineers shall have been convened and selected the site, and until the same and a free right of way to all points of the harbor shall have been transferred or relinquished, free of cost to the United States.
Clinch River.	Improving Clinch River, Tennessee, ten thousand dollars; of which sum six thousand dollars shall be expended above Haynes, in Clayburn County, and four thousand dollars below said point.
Oakland Harbor.	Improving Oakland Harbor, California, sixty thousand dollars; and the sums of money heretofore appropriated for this improvement and unexpended are hereby reappro-

priated, but the sums so appropriated and reappropriated shall not be available until the right of the United States to the bed of the estuary and training-walls of this work is secured, free of expense to the government, in a manner satisfactory to the Secretary of War. Reappropriation.

Improving Sullivan's Island for protection of Charleston Harbor, South Carolina, five thousand dollars. Sullivan Island.

Improving channel between Staten Island and New Jersey, at Elizabethport, twenty-nine thousand dollars. Staten Island-New Jersey channel.

Improving Missouri River at Lexington, Missouri, fifteen thousand dollars. Missouri River.

The Secretary of War is hereby authorized to assign an engineer from the Corps of Engineers of the United States to prepare a plan and advise with the local engineer in the expenditure of such sum as may be appropriated by the local authorities for the improvement of the harbor at Kewaunee, Wisconsin. Kewaunee Harbor.

Improving Volusia Bar, Florida, five thousand dollars; and the Secretary of War is hereby authorized to make such special contract for the prosecution of this work as may, in his judgment, best promote the interests of the government. Volusia bar.

The balance in hand, after payment of any existing liability, collected heretofore as tolls on the Louisville and Portland Canal, or which may hereafter be so collected prior to the passage of an act to make said canal free to the public, is hereby authorized to be expended for its improvement: *Provided*, Such expenditure shall not exceed sixty thousand dollars^[a]. Louisville and Portland Canal, tolls.
Proviso.

Improving Yellowstone River, Montana and Dakota, fifteen thousand dollars. Yellowstone.

Improving harbor at Brazos Santiago, Texas, twenty-five thousand dollars. Brazos Santiago Harbor.

For continuing the improvement of Sebewaing Harbor, Michigan, seven thousand dollars. Sebewaing Harbor.

For improvement of the entrance to Yaquina Bay, Oregon, forty thousand dollars. Yaquina Bay.

For improvement of the mouth of Coquille River, Oregon, ten thousand dollars. Coquille River.

Improving Savannah River, above Augusta, Georgia, sixteen thousand dollars. Savannah.

Improving the entrance to Cumberland Sound, between Amelia and Cumberland Islands, in the States of Florida and Georgia, according to the plans and estimates of General Gilmore, the chief engineer, reported to this Congress, thirty thousand dollars. Cumberland Sound.

Improving Saint John's River, Florida, by deepening the bar at the mouth thereof, according to the report of the Chief of Engineers made to the Secretary of War and reported to this Congress, one hundred and twenty-five thousand dollars. St. Johns River.

^a The amount expended under this item of the act was \$30,255.36.

Headwaters of
Mississippi.

Proviso.

General provi-
sions.

Proviso.

Proviso.

For the reservoirs at the headwaters of the Mississippi River, to be used in the construction of a dam at Lake Winnibigoshish, seventy-five thousand dollars: *Provided*, That all injuries occasioned to individuals by overflow of their lands shall be ascertained and determined by agreement or in accordance with the laws of Minnesota, and shall not exceed in the aggregate five thousand dollars.

Such parts of the money appropriated by this act for any particular improvement requiring locks and dams, as may be necessary in the prosecution of such improvement, may be expended in the purchase, voluntary or by condemnation, as the case may be, of necessary sites: *Provided*, That such expenditure shall be under the direction of the Secretary of War: *And provided further*, That if the owners of such lands shall refuse to sell them at reasonable prices, then the prices to be paid shall be determined and the title and jurisdiction procured in the manner prescribed by the laws of the State in which such lands or sites are situated.

It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements other than surveys, and estimates in carrying on the various works as far as can be, without detriment to the interest of the government by contract. Where such works can not be done by contract, without injury to the public interest, they may be prosecuted by hired labor. Where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution of the work according to such contract, and for the proper payment of all liabilities incurred in the prosecution thereof for labor and material; but this clause shall not be so construed as to prevent the continuance of work on the Great Kanawha by hired labor, unless the Secretary of War is satisfied that the public interest requires such change.

Contracts.

Hired labor.

A d v e r t i s e -
m e n t.

Performance
and payment for
material and
labor to be se-
cured.

Work on Kana-
wha excepted
from paragraph.

Surveys, ex-
aminations, and
estimates of cost
of improvements
proper to be
made.

SEC. 2. That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, and estimates of cost of improvements proper, to be made at the following points, namely:

Tallapoosa River, from the junction of Coosa up to Tallassee, Alabama.

New Rochelle Harbor, Westchester County, New York, from City Island to the town of New Rochelle.

Bronx River, or West Farms tide-water creek, from its mouth in the city of New York.

Mattawan Creek, from Raritan Bay channel to Central Railroad bridge, head of navigation.

Malden River, Massachusetts.

For improving Richmond Harbor on the Kennebec River, Maine.

Clinch River, in the counties of Hancock, Hawkins, and Claiborne, Tennessee, and Scott and Russell Counties, Virginia.

Powell River, in the counties of Hancock and Claiborne, Tennessee, and Lee County, Virginia.

Holston River, in the counties of Sullivan, Hawkins, Grainger, and Hamblen, Tennessee, and Washington and Scott Counties, Virginia.

Ticonderoga River, New York.

Edistoe and Salkiehatchie Rivers, in South Carolina.

Georgetown Harbor, South Carolina.

Lynch's River, South Carolina.

Wateree River, from Camden, South Carolina, to its mouth.

Black River, from Kingstree, South Carolina, to its mouth.

Rancocas River, from the Delaware River to Pemberton, Burlington County, New Jersey.

Absecon [Absecon] Inlet, Atlantic County, New Jersey.

Bayou Bartholomew, Tensas River, and Bayou Macon, Louisiana.

Sandusky River, near Fremont, Ohio.

Chagrin River, Ohio.

Ice-harbor, Bellaire, Belmont County, Ohio.

Toledo Harbor, Ohio, for depth of sixteen feet.

Tallapoosa River, from the city of Montgomery to Tallassee.

Neabsco Creek, a tributary of the Potomac.

Maumee River, Ohio, from Perrysburg to the city of Toledo.

Mississippi River, at Saint Genevieve, Missouri.

Missouri River, at Boonville, Missouri.

Saint Francis River, from Greenville.

Youghiogheny River, to begin at its mouth at McKeesport, Allegheny County, Pennsylvania, and end at Connelville, Fayette County, Pennsylvania.

Cape Fear River, North Carolina, between Wilmington and Fayetteville, with the view of ascertaining cost and practicability of clearing away logs and overgrowing trees and of dredging out such shoals as now interfere with commerce, itemizing cost of each separately.

Town Creek^a, North Carolina: To ascertain cost of taking out such shoals as interfere with ordinary river steamboat traffic.

For the reopening of the Santee Canal^b.

For the improvement of Wappoo Cut, South Carolina.

^aThe report upon this item concerns the creek of this name in Brunswick County, emptying into Cape Fear River about $7\frac{1}{2}$ miles below Wilmington.

^bThis canal is distinct either from the Mosquito Creek or the Estherville-Minin Creek Canal. It is located in Charleston County; was begun in 1793 and finished in 1800, under a charter granted in 1786 by the State legislature, and connects Santee River with the tidal headwaters of Cooper River.

Calcasieu River, Bayous Plaquemine, Black, Grand Caillon [Caillou], Little Caillon [Caillou], Andre, Fusilier, Grand Lake^a, Little Lake, and Barataria Bay, from New Orleans to Grand Pass.

For Snake River in Minnesota.

The headwaters of the Savannah River, in connection with the headwaters of the Hiwassee and Tennessee Rivers, with a view of ascertaining if a summit level can be secured of the waters of these respective streams, so as to unite them by a canal; that is to say, to ascertain if the waters of the Hiwassee and Tennessee Rivers can be united with the waters of the Savannah River by means of a canal.

The Savannah River, from Savannah to Augusta, Georgia.

The Altamaha River, Georgia.

The Canoochee River, Georgia.

Romney [Romerly] Marsh, near Doboy, and the mouth of Jekyl Creek.

Niagara River, at the mouth of Tonawanda Creek, New York.

At Port Day, above the Falls of Niagara, New York.

Shark River, New Jersey.

Perth and South Amboy to main ship-channel off Great Kills, Raritan Bay.

Improving the bayou^b south of Milwaukee Harbor for additional purposes of a harbor of refuge at Milwaukee; also, Milwaukee Bay.

Finhollaway River, Florida.

Aucilla and Wacissa, Florida.

Chipola River, Florida.

Ocolockonnee River, Florida.

Holmes Creek, Florida.

Potomac River at the mouth of Pohick Creek.

The bars at the entrance of Annapolis Harbor, with a view to ascertain the character of jetties necessary to render the proposed improvement permanent.

For Hempstead Harbor in the State of New York.

Sumpawaums [Sumpawanus] Inlet, Long Island, New York.

For water-way connecting Jamaica Bay with Cornell's Landing in the State of New York.

Saint Francis River, from Greenville, Missouri, to the Cairo, Arkansas and Texas Railroad.

Currant River, from Van Buren, Missouri, to its mouth in Arkansas.

Chicago River, from its mouth to the junction of the North and South Branches.

^a This lake forms part of the Atchafalaya River on its way to the Gulf.

^b Refers to the channel of Milwaukee River extending to the old river mouth and forming a part of the inner harbor.

Grand River below Grand Rapids, Michigan.

Swan Creek, Lake Saint Clair, Michigan.

South Fork of the Cumberland River, Kentucky.

Red River from Port Royal, Montgomery County, Tennessee, to its mouth.

Mouth of Narraguagus River at Milbridge, Maine.

Cahaba River, Alabama, from its mouth, in Dallas County, to the northern line of Bibb County.

Empire Bay, Lelanawau County, Michigan.

Mississippi River, at Andalusia, Illinois.

Missouri River, at Yankton, Dakota.

Upper Red River of the North, between Fargo, Dakota, and Breckinridge, Minnesota.

Atchafalaya River, Louisiana, from Berwick's Bay to mouth of Red River.

Ice-harbor at the head of Delaware Bay, near Morris Liston's on Reedy's Island.

Delaware River, survey of.

Tradewater River, Kentucky.

Harbor at Grand Gulf, Mississippi.

Ogdensburg Harbor, New York.

Maramec River, Missouri, from the mouth to the point opposite Maramec Iron Works, Missouri.

Mississippi River, at Louisiana, Missouri.

Obion River, Tennessee.

South Forked Deer River, Tennessee.

North Forked Deer River, Tennessee.

That part of the North Branch of the Chicago River lying in the town of Lake View.

Bogue Chitto River, Louisiana, from its mouth to Franklinton.

Bogue Falia, Louisiana, from its mouth to twenty-five miles above Covington.

West Pearl River.

Pass Manchac and Bayou Manchac, Louisiana, from its mouth to the Mississippi River.

Mississippi River, at Sauk Rapids, near the city of Saint Cloud, Minnesota.

Grand River, below Grand Rapids, Michigan.

Gowanus Bay, New York.

Grass River, at Massena, Saint Lawrence County, New York.

Missouri River, from Tuque Creek to one mile west of Charette Creek, Warren County, Missouri.

Cache River, Arkansas, a tributary of White River.

The Bay, a tributary of Saint Francis River, Arkansas.

Mouth of Grand River and Missouri River, at Brunswick, with reference to boat landing at Brunswick, Missouri.

Buffalo Bayou, Texas, from Simm's Bayou, to the mouth of White Oak Bayou at Houston. Return estimates of the cost of a channel twelve feet deep and one hundred feet

wide, also a channel twelve feet deep and one hundred and fifty feet wide.

Mouth of Currioman Bay, Virginia.

East Bay and Blackwater River, Florida.

The Ohio River, at the head of Hurricane Island and Elizabethtown, Illinois.

Chester and Ridley Creeks, near their outlets into the Delaware River, Pennsylvania.

Saint Mary's River, from the town of Saint Mary's to its mouth, Ohio.

Minnesota River, near the village of Belle Plain, with a view to prevent the breaking away of the banks of the narrow neck of land opposite said village and injury to the navigation of said river, in Minnesota.

The Nomoni River, from the ferry across the same to the head of tide-water.

The Appoquinimink Creek, Delaware.

Patchogue River, New York.

For opening channel between Lloyd's Harbor and Cold Spring Bay, New York.

Stillaquamish River, Nooksack River, and Snohomish River, in Washington Territory.

Wareham Harbor, Massachusetts.

Red Bank Creek, Pennsylvania, from its mouth on the Allegheny River, to Brookville.

Saint Jones Creek, in Kent County, Delaware, and Little Creek, in Kent County, Delaware.

Clinton River and Lake Saint Clair, at the mouth of Clinton River, Michigan.

For the construction of two ice-breakers in the Ohio River, near the West Virginia shore, and below the railroad bridge crossing said river at Parkersburg.

Ice-harbor at Point Pleasant, West Virginia.

Christiana River, Delaware, from the Delaware Railroad bridge, to the mouth of the river, with an estimate of the cost of procuring a mean depth of fifteen feet in the channel thereof.

For the opening of a ship-canal across the Charleston Neck, South Carolina.

Chester River, between Kirby's Landing and Spry's Landing, Maryland.

Water-passage^[a] between Deal's Island and Little Deal's Island, Maryland.

Bœuf River, North Louisiana.

Potowomut River, Rhode Island.

For a harbor on Lake Michigan, at Kewaunee, Wisconsin.

For the opening of steamboat communication from the Saint John's River, Florida, by way of Topokalija^[b] Lake, to Charlotte Harbor or Pease Creek.

The Missouri River at Niobrara, Nebraska.

^a Known as the Lower Thoroughfare.

^b Spelled also Tohopekaliga.

Pocosson^a and Lillington Rivers, and Beaufort Harbor, North Carolina.

The Secretary of War is hereby directed to cause to be made such examination and surveys as may be necessary to devise a system of works to prevent the further injury to the navigable waters of California from the ^{Débris from} mines, and the estimates of the cost of such works, and report the result of such examinations, surveys, and estimates of cost of proposed works made in pursuance hereof to Congress at its next session.

The Secretary of War is hereby directed to cause an examination to be made to determine the work necessary to be done, and the cost of the same, to improve the channels inside the bar of Humboldt Bay, ^{Humboldt Bay, Cal.} California.

That for the purpose of making a survey to ascertain the practicability and cost of construction of a ship-canal from Lake Erie, by the Maumee and Wabash Valleys, in the bed of the old Wabash and Erie Canal, or with any variation therefrom that may prove feasible, to the navigable waters of the Wabash River; also for a survey and estimate of cost of a similar canal from Junction City, on the Wabash and Erie Canal, to the Ohio River, by way of the Miami and Erie Canal, or any variation in route to produce the most practical and least expensive ship-canal from Lake Erie to the navigable waters of the Ohio River by the above routes, the estimates in each case to be for a water channel and locks of the same size and capacity as those of the present enlarged Erie Canal in New York. ^{Ship canals.}

Sinslaw [Siuslaw] Bay, Oregon.

Of the sum of one hundred and fifty thousand dollars herein appropriated for surveys and examinations, the sum of fifteen thousand dollars may be expended in the completion of the survey of the reservoir system on the headwaters of the Mississippi River, including Rock River, in Wisconsin and Illinois.

SEC. 3. That for the examinations and surveys herein provided for, and for incidental repairs of harbors, for which there is no special appropriation, the sum of one hundred and fifty thousand dollars is hereby appropriated out of any money in the Treasury not otherwise appropriated; and in every case where examinations or surveys are made, the report thereon shall embrace such information concerning the commercial importance, present and prospective, of the improvement contemplated thereby, and such general commercial statistics, as the Secretary of War may be able to procure. ^{Appropriation for surveys, etc.}

SEC. 4. Whenever hereafter the navigation of any river, lake, harbor, or bay, or other navigable water of the United States, shall be obstructed or endangered by any sunken vessel or water-craft, it shall be the duty of the Secretary of ^{Navigation obstructed by sunken vessels or water-craft.}

^aThis refers to Contentnia Creek, the use of the designation "Pocosson" being a clerical error, and having reference to Moccason (or Moccasin) River, the former name of this creek. (See Annual Report of the Chief of Engineers for 1881, p. 1010, Part 1.)

Vol. 22, p. 208.
Post, p. 883.
 Vol. 26, p. 454.
Post, p. 588.
 Vol. 30, pp. 1152,
 1154.
Post, pp. 889,
 891.

Notice given to
 persons interest-
 ed to remove
 same.

Removal.
 Sunken vessels,
 cargoes, and all
 property remov-
 ed by the Govern-
 ment to be sold
 and proceeds de-
 posited in Treas-
 ury to credit of
 fund for removal
 of obstructions.

Appropriation.

War, upon satisfactory information thereof, to cause reason-
 able notice, of not less than thirty days, to be given person-
 ally or by publication, at least once a week in the newspaper
 published nearest the locality of such sunken vessel or craft,
 to all persons interested in such vessel or craft, or in the
 cargo thereof, of the purpose of said Secretary, unless such
 vessel or craft shall be removed as soon thereafter as prac-
 ticable by the parties interested therein, to cause the same
 to be removed. If such sunken vessel or craft and cargo
 shall not be removed by the parties interested therein as soon
 as practicable after the date of the giving of such notice by
 publication, or after such personal service of notice, as the
 case may be, such sunken vessel or craft shall be treated as
 abandoned and derelict, and the Secretary of War shall pro-
 ceed to remove the same. Such sunken vessel or craft and
 cargo and all property therein when so removed shall, after
 reasonable notice of the time and place of sale, be sold to the
 highest bidder or bidders for cash, and the proceeds of such
 sales shall be deposited in the Treasury of the United States
 to the credit of a fund for the removal of such obstructions
 to navigation, under the direction of the Secretary of War,
 and to be paid out for that purpose on his requisition there-
 for. The provisions of this act shall apply to all such wrecks
 whether removed under this act or under any other act of
 Congress. Such sum of money as may be necessary to ex-
 ecute this section of this act is hereby appropriated, out of
 any money in the Treasury of the United States not other-
 wise appropriated, to be paid out on the requisition of the
 Secretary of War^[a].

Approved, June 14, 1880.

June 16, 1880.

Vol. 21, p. 238.

CHAP. 234.—An Act Making appropriations to supply deficiencies
 in the appropriations for the fiscal year ending June thirtieth, eighteen
 hundred and eighty, and for prior years, and for those certified as due
 by the accounting-officers of the Treasury in accordance with section
 four of the Act of June fourteenth, eighteen hundred and seventy-
 eight, heretofore paid from permanent appropriations, and for other
 purposes.

Deficiency ap-
 propriations, 1880
 and prior years.

*Be it enacted by the Senate and House of Representatives
 of the United States of America in Congress assembled,* That
 the following sums be, and the same are hereby, appropri-
 ated, out of any money in the Treasury not otherwise appro-
 priated, for the objects hereinafter stated, namely:

* * * * *

J. Volney Sweet-
 ing, S. R. Rood, J.
 C. Thompson, Eli
 Stilson, James H.
 Foster, David M.
 Green, Miles T.
 Alverson.
 1876, c. 166, 18
 Stat., 506.

For payment of J. Volney Sweeting, S. R. Rood, and
 J. C. Thompson, eight hundred and ten dollars each, Eli
 Stilson, James H. Foster, and David M. Green, seven
 hundred and ten dollars each, and Miles T. Alverson, four
 hundred and fifty dollars; in all, five thousand and ten

^a This section is amended by the river and harbor acts of August 2,
 1882, September 19, 1890 (sec. 8), and March 3, 1899 (secs. 15, 19, and 20).

dollars, for services rendered by them as commissioners appointed pursuant to an act of Congress approved March third, eighteen hundred and seventy-five, to appraise damages to lands in the State of Wisconsin, caused by the improvement of the Fox and Wisconsin Rivers. Commissioners.

* * * * *

Approved, June 16, 1880.

CHAP. 235.—An Act Making appropriations for the sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, and for other purposes. June 16, 1880. Vol. 21, p. 259.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, namely: Appropriations. Sundry civil expenses.

* * * * *

Mississippi River Commission: For surveys and examinations and the necessary salaries and other expenses of the Mississippi River Commission, one hundred and fifty thousand dollars. Mississippi River Commission.

* * * * *

Approved, June 16, 1880.

CHAP. 238.—An Act To authorize the Mississippi River Logging Company to construct and operate sheer-booms at or near Straight Slough. June 16, 1880. Vol. 21, p. 282.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be lawful for the Mississippi River Logging Company, a corporation organized under the laws of the State of Iowa, to construct and operate in conformity with plans to be approved by the Secretary of War sheer-booms in the Mississippi River, at or above the head of Rollingsstone Slough and below the mouth of the Chippewa River, for the purpose of sheering logs that may escape and float out of the Chippewa River and into the Mississippi River from the main channel of said river into Rollingsstone or Straight Slough: *Provided*, That said sheer-booms shall not be constructed until the plans and location of the same are submitted to the Secretary of War and receive his approval or so constructed as to interfere with or obstruct navigation: *And provided further*, That if, after said sheer-booms are so constructed, in the opinion of the Secretary of War they interfere with or obstruct navigation, he may order them removed or modified, and the said Mississippi River Logging Company shall be required to remove the same without cost to the United States. Mississippi River Logging Company authorized to construct and operate sheer booms in Mississippi River. Proviso. Proviso.

Piers and
booms.

SEC. 2. That the said Mississippi River Logging Company are hereby authorized to construct, in Rollingstone or Straight Slough, such piers and booms as they shall deem necessary for the purpose of securing, holding, sluicing, and rafting logs that may float into said slough.

Right of repeal
and amendment
reserved.

SEC. 3. That this act may be altered, amended, or repealed at any time; and in case of such alteration, amendment, or repeal, it is expressly provided that the United States shall not be liable for any damages that may be sustained by reason thereof.

Approved, June 16, 1880.

Jan. 13, 1881.
Vol. 21, p. 602.

CHAP. 20.—An Act For the relief of the legal representative of Henry M. Shreve, deceased.

Henry M.
Shreve, de-
ceased, payment
to legal repre-
sentatives of.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury pay to the legal representatives of Henry M. Shreve, deceased, the sum of fifty thousand dollars as a full compensation for, and in satisfaction of, all claims for the invention of the steam snagboat, and for the use of the same, past, present, and future, and for any and all rights that the said Shreve may have acquired under the patent granted to him for the invention of the steam snagboat.

Approved, January 13, 1881.

Mar. 3, 1881.
Vol. 21, p. 435.

CHAP. 133.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-two, and for other purposes.

Appropriations.
Sundry civil
expenses.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed, for the fiscal year ending June thirtieth, eighteen hundred and eighty-two, namely:

* * * * *

Mississippi
River Commis-
sion.

Mississippi River Commission: For salaries and traveling expenses of Commission, office expenses, and reduction of work; for continuation of surveys and gaugings of Mississippi River and its tributaries; for permanent gauge-stations and borings; for publication of maps and results, one hundred and fifty thousand dollars.

* * * * *

Surveys of
Maryland and
Delaware penin-
sula.

For the expenses of the surveys to be made across the peninsula of Maryland and Delaware to connect by canal the waters of the Delaware and Chesapeake Bays, under the direction of the Secretary of War, ten thousand dollars.

* * * * *

Approved, March 3, 1881.

CHAP. 136.—An Act Making appropriations for the construction, completion, repair, and preservation of certain works on rivers and harbors, and for other purposes.

Mar. 3, 1881.
Vol. 21, p. 468.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, and to be expended under the direction of the Secretary of War, for the construction, completion, repair, and preservation of the public works hereinafter named:

Appropriations.
Rivers and harbors.

Improving Richmond Island Harbor, Maine: Completing improvement three thousand dollars. Richmond Island Harbor.

Improving harbor at Portsmouth, New Hampshire, twenty thousand dollars. Portsmouth Harbor.

Improving harbor at Burlington, Vermont, ten thousand dollars. Burlington Harbor.

Improving harbor at Swanton, Vermont, two thousand five hundred dollars. Swanton Harbor.

Improving harbor at Hyannis, Massachusetts: Completing improvement, five thousand dollars. Hyannis Harbor.

Improving harbor at Newburyport, Massachusetts, forty thousand dollars. Newburyport Harbor.

Improving harbor at Nantucket, Massachusetts, twenty-five thousand dollars. Nantucket Harbor.

Improving harbor at Plymouth, Massachusetts, ten thousand dollars. Plymouth Harbor.

Improving harbor at Provincetown, Massachusetts, five thousand dollars. Provincetown Harbor.

Improving Little Narragansett Bay, Rhode Island, five thousand dollars. Little Narragansett Bay.

Improving harbor at Bridgeport, Connecticut, ten thousand dollars. Bridgeport Harbor.

Improving harbor at New Haven, Connecticut, fifteen thousand dollars. New Haven Harbor.

Breakwater at New Haven, Connecticut, sixty thousand dollars. New Haven breakwater.

Improving harbor at Norwalk, Connecticut, five thousand dollars. Norwalk Harbor.

Improving harbor at Southport, Connecticut, two thousand five hundred dollars. Southport Harbor.

Improving harbor at Boston, Massachusetts, one hundred thousand dollars; of which sum forty thousand dollars shall be expended in said harbor, thirty-five thousand dollars at the mouth of Charles River in said harbor and up to Watertown, twenty thousand dollars in said harbor at mouth of Mystic River, and five thousand dollars from said harbor to Nantasket Beach. Boston Harbor, etc.

Improving Oakland Harbor, California, sixty thousand dollars; and the sums of money heretofore appropriated for this improvement and unexpended are hereby reappropriated; but the sums so appropriated and reappropriated shall not be available until the right of the United States to the bed of the estuary and training walls of this work is secured, Oakland Harbor.

free of expense to the government, in a manner satisfactory to the Secretary of War.

- Raritan River. Improving Raritan River, New Jersey, twenty-five thousand dollars; of which sum twenty thousand dollars shall be expended on rocks at Whitehead Sand Dock, and five thousand dollars at South Channel, between Crab Island and South Amboy.
- Stonington Harbor. Improving harbor at Stonington, Connecticut, thirty thousand dollars.
- Buffalo Harbor. Improving harbor at Buffalo, New York, ninety thousand dollars.
- Charlotte Harbor. Improving harbor at Charlotte, New York: Repair of piers, two thousand five hundred dollars.
- Echo Harbor. Improving Echo Harbor, New Rochelle, New York, three thousand dollars.
- Flushing Bay. Improving Flushing Bay, New York, ten thousand dollars.
- Great Sodus Bay Harbor. Improving harbor at Great Sodus Bay, New York, five thousand dollars.
- Little Sodus Bay Harbor. Improving harbor at Little Sodus Bay, New York, twenty thousand dollars.
- Olcott Harbor. Improving harbor at Olcott, New York, three thousand dollars.
- Gowanus Bay. Deepening and widening the channel in Gowanus Bay and the Harbor of New York, forty thousand dollars.
- Port Jefferson Harbor. Improving harbor at Port Jefferson, Long Island Sound, New York, four thousand dollars.
- New Rochelle Harbor. Improving harbor of New Rochelle, New York, twenty thousand dollars.
- Harbor at Pultneyville. Improving harbor at Pultneyville, New York, two thousand dollars.
- Wilson Harbor. Improving harbor at Wilson, New York, ten thousand dollars.
- Waddington Harbor. Improving harbor at Waddington, New York, two thousand five hundred dollars.
- Ticonderoga River. Improving Ticonderoga River, New York, five thousand dollars.
- Erie Harbor. Improving harbor at Erie, Pennsylvania, twenty thousand dollars.
- Marcushook ice harbor. Ice-harbor at Marcus Hook, Pennsylvania, thirty thousand dollars.
- Pier, Delaware Bay. Pier in Delaware Bay, near Lewes, Delaware, ten thousand dollars.
- Piers, ice harbor, Newcastle. Piers of ice-harbor at New Castle, Delaware: Completing improvement, twenty thousand dollars.
- Annapolis Harbor. Improving harbor at Annapolis, Maryland, five thousand dollars.
- Breton Bay. Improving Breton Bay, Leonardtown, Maryland, three thousand dollars.
- Washington and Georgetown harbors and channels. Improving the harbors and channels at Washington and Georgetown, District of Columbia, fifty thousand dollars.
- Norfolk Harbor. Improving harbor at Norfolk, Virginia, and its approaches, seventy-five thousand dollars.

For enlargement and improvement, according to the plan and recommendation of the Engineer Department, of harbor facilities at Oswego, New York, including dredging entrance to harbor, fifty thousand dollars. Oswego Harbor.

Improving Shrewsbury River, New Jersey: Completing improvement, eighty-six thousand dollars; of which sum thirty-six thousand dollars shall be expended on South Branch, and fifty thousand on Main and North Branch. Shrewsbury River.

Improving New River from lead mines in Wythe County, Virginia, to mouth of Greenbrier River, twenty-four thousand dollars; of which sum fifteen thousand dollars shall be expended in the continuation of the work from the mouth of Greenbrier up, and nine thousand dollars in the continuation of the work from the lead mines in Wythe County down. New River.

Improving harbor at Charleston, South Carolina, one hundred and seventy-five thousand dollars. Charleston Harbor.

Improving harbor at Brunswick, Georgia, five thousand dollars. Brunswick Harbor.

Improving Savannah Harbor and River, Georgia, sixty-five thousand dollars; of which sum one thousand dollars may be applied to payment of damages for land taken for widening the channel opposite Savannah. Savannah Harbor and River.

Improving Apalachicola Bay, Florida, ten thousand dollars. Apalachicola Bay.

Improving Tampa Bay, Florida: Completing the deepening of the bar and channel from the bar to the town of Tampa, ten thousand dollars. Tampa Bay.

Improving harbor at Mobile, Alabama, one hundred thousand dollars. Mobile Harbor.

Improving Mississippi River at and near Vicksburgh, and protection of harbor of Vicksburgh, Mississippi, seventy-five thousand dollars. Mississippi River and Vicksburgh Harbor.

Improving harbor at New Orleans, Louisiana, seventy-five thousand dollars. New Orleans Harbor.

Improving Galveston Harbor, Texas: Continuing operations at outer bar, two hundred and fifty thousand dollars. Galveston Harbor.

Improving harbor at Ashtabula, Ohio: To secure a sixteen-foot channel, twenty thousand dollars. Ashtabula Harbor.

Improving harbor at Black River, Ohio, seven thousand dollars. Black River (Lorain).

Improving harbor at Cleveland, Ohio, two hundred thousand dollars. Cleveland Harbor.

Improving harbor at Fairport, Ohio, ten thousand dollars. Fairport Harbor.

Improving harbor at Huron, Ohio, three thousand dollars. Huron Harbor.

Ice-harbor at mouth of Muskingum River, Ohio, thirty thousand dollars. Ice harbor, Muskingum River.

Improving harbor at Port Clinton, Ohio, five thousand dollars. Port Clinton.

Improving harbor at Sandusky City, Ohio, ten thousand dollars. Sandusky.

- Toledo. Improving harbor at Toledo, Ohio, forty thousand dollars.
- Vermilion. Improving harbor at Vermillion, Ohio, two thousand dollars.
- Michigan City. Improving harbor at Michigan City, Indiana: Continuing operations at outside harbor, twenty thousand dollars; for continuing improvements on the inner harbor, twenty-five thousand dollars.
- Calumet. Improving harbor at Calumet, Illinois, thirty thousand dollars.
- Chicago. Improving outside harbor at Chicago, Illinois: Dredging in outer harbor and constructing exterior breakwater, one hundred and fifty thousand dollars.
- Galena River and Harbor. Improving Galena River and Harbor, Illinois, twelve thousand dollars.
- Rock Island Harbor. Improving harbor at Rock Island, Illinois, six thousand dollars.
- Monongahela River. Improving Monongahela River, West Virginia and Pennsylvania, twenty-five thousand dollars; but this sum shall not be expended until the Monongahela Navigation Company shall have undertaken in good faith the building of lock and dam number seven, at Jacob's Creek, and until said company shall, in manner satisfactory to the Secretary of War, give assurance of their ability and purpose to complete the same.
- Shenandoah River. Improving Shenandoah River, West Virginia, two thousand five hundred dollars; but this sum shall not be expended, nor shall the sum heretofore appropriated therefor be expended, until any corporate rights or franchises [*sic*] that may exist over said river shall have been relinquished to the United States to the satisfaction of the Secretary of War.
- Waukegan Harbor. Improving harbor at Waukegan, Illinois, fifteen thousand dollars.
- Ice harbor, St. Louis. Ice-harbor at Saint Louis, Missouri, ten thousand dollars.
- Memphis Harbor. Improving harbor and the Mississippi River at Memphis, Tennessee, fifteen thousand dollars.
- Au Sable Harbor. Improving harbor and river at Au Sable, Michigan, six thousand dollars.
- Charlevoix Harbor. Improving harbor at Charlevoix, Michigan, ten thousand dollars.
- Cheboygan Harbor. Improving harbor at Cheboygan, Michigan, six thousand dollars.
- Frankfort Harbor. Improving harbor at Frankfort, Michigan, ten thousand dollars.
- Grand Haven. Improving harbor at Grand Haven, Michigan, fifty thousand dollars.
- Black Lake (Holland). Improving harbor at Black Lake, Michigan: Continuing operations for completion of old project, six thousand dollars.
- Harbor of refuge at Grand Marais. Harbor of refuge at Grand Marais, Michigan, twenty thousand dollars.

Harbor of refuge at Lake Huron, Michigan, fifty thousand dollars.	Sand beach (Harbor Beach).
Improving harbor at Ludington, Michigan, ten thousand dollars.	Ludington.
Improving harbor at Manistee, Michigan, ten thousand dollars.	Manistee.
Improving Manistique Harbor, Michigan: Completing improvement, one thousand dollars.	Manistique.
Improving harbor at Monroe, Michigan, one thousand dollars.	Monroe.
Improving harbor at Muskegon, Michigan, twenty thousand dollars.	Muskegon.
Improving harbor at Ontonagon, Michigan, twenty thousand dollars.	Ontonagon.
Improving harbor at Pentwater, Michigan, ten thousand dollars.	Pentwater.
Harbor of refuge at Portage Lake, Michigan, ten thousand dollars.	Harbor of refuge, Portage Lake.
Improving river and harbor at Saint Joseph, and water-channel leading up to Benton Harbor, Michigan, ten thousand dollars.	St. Joseph Harbor and River.
Improving harbor at Saugatuck, Michigan, five thousand dollars.	Saugatuck Harbor.
Improving harbor at South Haven, Michigan, five thousand dollars.	South Haven Harbor.
Improving harbor at White River, Michigan, seven thousand five hundred dollars.	White River Harbor.
Improving Grand River from its mouth to the city of Grand Rapids, Michigan, ten thousand dollars.	Grand River.
Continuing improvement of Clinton River, Michigan, eight thousand dollars.	Clinton River.
Removing bar at ice-harbor of refuge at Belle River, Michigan, seven thousand dollars.	Ice harbor refuge, Belle River, removing bar.
Improving harbor at Ahnapee, Wisconsin, eight thousand dollars.	Ahnapee Harbor.
Improving harbor at Green Bay, Wisconsin, five thousand dollars.	Green Bay Harbor.
Improving harbor at Kenosha, Wisconsin, five thousand dollars.	Kenosha Harbor.
Improving Ohio River, three hundred and fifty thousand dollars; of which sum one hundred and fifty thousand dollars may, in the discretion of the engineers, be expended on Davis Island Dam, and two hundred thousand dollars on the river from its mouth to its head: <i>Provided</i> , That fifty thousand dollars of the last-named sum may, in the discretion of the engineers, be expended on Indiana Chute; and fifty thousand dollars of the last-named sum, or so much thereof as shall be necessary, shall be applied to the completion of the work on Grand Chain.	Ohio River, Davis Island dam.
Improving harbor at Manitowoc, Wisconsin, four thousand dollars.	Manitowoc.
Improving harbor at Menomonee, Wisconsin, twelve thousand dollars.	Menominee.

Milwaukee.	Improving harbor at Milwaukee, Wisconsin: Extension and repairs of piers and dredging, eight thousand dollars.
Port Washington.	Improving harbor at Port Washington, Wisconsin, seventeen thousand dollars.
Racine.	Improving harbor at Racine, Wisconsin, six thousand dollars.
Sheboygan.	Improving harbor at Sheboygan, Wisconsin: Repairs, dredging, and extension of piers, twenty-five thousand dollars.
Superior Bay.	Improving Superior Bay, Wisconsin: Dredging for improvement of natural entrance and for repairing existing works, ten thousand dollars.
Sturgeon Bay Canal, harbor of refuge.	Harbor of refuge at Sturgeon Bay Canal, Wisconsin, ten thousand dollars.
Two Rivers Harbor.	Improving harbor at Two Rivers, Wisconsin, fifteen thousand dollars.
Oconto Harbor.	Improving harbor at Oconto, Wisconsin, ten thousand dollars.
Fort Madison Harbor.	Improving harbor at Fort Madison, Iowa, two thousand five hundred dollars.
Muscatine Harbor.	Improving harbor at Muscatine, Iowa, two thousand five hundred dollars.
Grand Marais.	Improving harbor at Grand Marais, Minnesota, twenty thousand dollars.
Duluth.	Improving harbor at Duluth, Minnesota, forty thousand dollars.
Wilmington.	Improving harbor at Wilmington, California, thirty-three thousand dollars.
Humboldt.	Improving Humboldt Harbor and Bay, forty thousand dollars.
Cathance River.	Improving Cathance River, Maine, six thousand dollars.
"Gut," opposite Bath, Me.	Improving the "Gut" ^a , opposite Bath, Maine, five thousand dollars.
Kennebunk River.	Improving Kennebunk River, Maine: Completing improvement, two thousand dollars.
Lubec Channel.	Improving Lubec Channel, Maine, forty-five thousand dollars.
Exeter River—"Ox Bow."	Improving Exeter River, New Hampshire, fifteen thousand dollars; of which sum an amount not exceeding seven hundred and fifty dollars shall be available immediately, to be used in acquiring title to land used in the cut-off at "Ox Bow."
Lamprey River.	Improving Lamprey River, New Hampshire, below New Market, ten thousand dollars.
Winnepesaukee Lake.	Improving Winnepiseogee [Winnepesaukee] Lake, New Hampshire: Completing improvement, two thousand five hundred dollars: <i>Provided</i> , That no right to raise or lower the water-level of said lake is hereby granted to any person or corporation.
Proviso.	
Otter Creek.	Improving Otter Creek, Vermont, two thousand dollars.
Merrimac River.	Improving Merrimac River, Massachusetts, nine thousand dollars.

^aThe Gut is a part of the Sasanoa (or Back) River.

Improving Taunton River, Massachusetts, twenty-five thousand dollars. Taunton River.

Improving Providence River and Narragansett Bay, Rhode Island, sixty thousand dollars. Providence River and Narragansett Bay.

Improving Potomowut [Potowomut] River, Rhode Island, five thousand dollars. Potowomut River.

Improving Milwaukee Bay, for purposes of harbor of refuge, one hundred thousand dollars. Milwaukee Bay.

Improving Mississippi, Missouri, and Arkansas Rivers: Removing snags, wrecks, and other obstructions, one hundred and eighty-five thousand dollars; of which sum eighty thousand dollars shall be expended on the Mississippi River, eighty thousand dollars on the Missouri River, and twenty-five thousand dollars on the Arkansas River. And the work herein provided for shall be prosecuted at all seasons of the year, and especially between the first day of July and the first day of November of each year: *Provided*, That so much of said sum of eighty thousand dollars hereby appropriated to the Missouri River as may be necessary shall be expended in the construction of a snag and dredge boat to be used in said river, the balance of said eighty thousand dollars to be expended in operating said boat. Mississippi, Missouri, and Arkansas rivers.

Improving Chippewa River, Wisconsin, ten thousand dollars; but this sum is appropriated subject to the same conditions and limitations imposed by section one of the act approved March third, eighteen hundred and seventy-nine, for the improvement of rivers and harbors, relating to said Chippewa River. *Proviso.*

Improving Connecticut River below Hartford, Connecticut, thirty thousand dollars; of which sum ten thousand dollars shall be used to continue the work in progress on the bar at the mouth of the river, and three thousand dollars in dredging the channel below Rocky Hill. Chippewa River.

Improving Housatonic River, Connecticut, two thousand dollars. 1879, c. 181; 20 Stat., 372.

Improving Thames River, Connecticut, thirty thousand dollars. Connecticut River.

Improving New London Harbor, Connecticut, four thousand three hundred dollars. New London Harbor.

Removing obstructions in East River and Hell Gate, New York, two hundred thousand dollars. East River, Hell Gate, removing obstructions.

Improving Buttermilk Channel, New York, sixty thousand dollars. Buttermilk channel.

Improving Hudson River, New York, fifteen thousand dollars. Hudson River.

Improving Cheesequake's Creek, New Jersey, five thousand dollars. Cheesequake Creek.

Improving Cohansey Creek, New Jersey, seven thousand dollars. Cohansey Creek.

Improving Elizabeth River, New Jersey, four thousand dollars. Elizabeth River.

Improving Passaic River, New Jersey, from Pennsylvania Railroad bridge to its mouth, fifty thousand dollars. Passaic River.

Rahway River.	Improving Rahway River, New Jersey, ten thousand dollars.
South River.	Improving South River, New Jersey, six thousand dollars.
Woodbridge Creek.	Improving Woodbridge Creek, New Jersey: Continuing improvement, five thousand dollars.
Allegheny River.	Improving Allegheny River from mouth of French Creek to Pittsburgh, Pennsylvania, twenty-five thousand dollars.
Schuylkill River.	Improving Schuylkill River, Pennsylvania, forty thousand dollars.
Delaware River.	Improving Delaware River below Bridesburg, Pennsylvania, one hundred thousand dollars.
.	Improving Delaware River between Trenton, New Jersey, and Bridesburg, Pennsylvania, ten thousand dollars.
.	Improving Delaware River near Cherry Island Flats, one hundred thousand dollars.
.	Improving Delaware River at Schooner Ledge, Pennsylvania and Delaware, forty thousand dollars.
Broadkill River.	Improving Broadkill River, Delaware, five thousand dollars.
Mississippi River. H. Ex. Doc. 58, 46th Cong., 2d sess.	For the improvement of the Mississippi River, in accordance with the plan therefor recommended in [House] Executive Document number fifty-eight, second session Forty-sixth Congress, by the Mississippi River Commission, to be expended by the Secretary of War, with the advice and under the supervision of said commission, the sum of one million dollars. And it shall be the duty of said commission to take into consideration, and of the Secretary of War to extend operations, under their supervision, to tributaries of the Mississippi River to the extent, and no further, that may be necessary in the judgment of said commission to the perfection of the general and permanent improvement of said Mississippi River; but this clause shall not be construed to interfere with the prosecution by the War Department of the improvement of said Mississippi River and its tributaries under general appropriations made therefor: <i>Provided</i> , That no portion of the sum hereby appropriated shall be used in the repair or construction of levees for the purpose of preventing injury to lands by overflow, or for any other purpose whatever except as a means of deepening or improving the channel of said river. And it shall be the duty of said commission to make report, on or before the first day of January next, to the Secretary of War, for transmission by him to Congress, of a detailed statement of the work done, and of the expenditure made from the sum hereby appropriated, with their judgment upon the effect of such work, and the general practicability and estimate of the total cost of such improvements along said river from Cairo to the head of the passes.
General and permanent improvement.	
Proviso.	
Report.	
Broad Creek River.	Improving Broad Creek [Broad Creek River] from its mouth to Laurel, Delaware, ten thousand dollars.

- Improving mouth of Duck Creek [Smyrna River], Delaware, three thousand dollars. Smyrna River.
- Improving Mispillion Creek, Delaware, three thousand five hundred dollars. Mispillion Creek.
- Improving Choptank River between Denton and Greensborough, Maryland, five thousand dollars. Choptank River.
- Improving Elk River, Maryland, five thousand dollars. Elk River.
- Improving Secretary Creek [Warwick River], Maryland, three thousand dollars. Warwick River.
- Improving Threadhaven [Tred Avon] Creek for three miles below Easton, Maryland three thousand dollars. Tred Avon Creek.
- Improving Wicomico River^a below Salisbury, Maryland: Completing improvement, two thousand dollars. Wicomico River.
- Improving Chester River from Spry's Landing to Crumpton, Maryland, six thousand five hundred dollars. Chester River.
- Improving water-passage^b between Deal's Island and Little Deal's Island, Maryland, five thousand dollars. Water passage, Deal Island.
- Improving Appomattox River, Virginia, twenty thousand dollars to be expended on the improvement of the river and harbor at Petersburg, Virginia. Appomattox River.
- Improving Blackwater River, Virginia, one thousand five hundred dollars. Blackwater River.
- Improving Chickahominy River, Virginia, two thousand dollars. Chickahominy River.
- Improving Dan River between Danville, Virginia, and Madison, North Carolina, eight thousand dollars. Dan River.
- Improving James River, Virginia, sixty thousand dollars. James River.
- Improving Mattaponi River, Virginia, three thousand three hundred dollars. Mattaponi River.
- Improving mouth of Nomoni Creek, Virginia, two thousand dollars. Nomini Creek.
- Improving North Landing River, Virginia and North Carolina, seven thousand five hundred dollars. North Landing River.
- Improving Nottaway River, Virginia, two thousand dollars. Nottaway River.
- Improving Pagan Creek, Virginia, five thousand dollars. Pagan Creek.
- Improving Pamunkey River, Virginia, two thousand five hundred dollars. Pamunkey River.
- Dredging a channel through the flats in front of Mount Vernon, Virginia, one thousand five hundred dollars. Channel at Mount Vernon, Va.
- Improving Rappahannock River, Virginia, fifteen thousand dollars. Rappahannock River.
- Improving Staunton River, Virginia, five thousand dollars. Staunton River.
- Improving Totuski [Totuskey] River, Virginia, two thousand five hundred dollars. Totuskey River.
- Improving Urbana Creek, Virginia, four thousand dollars. Urbana Creek.
- Improving York River at West Point, Virginia, twenty-five thousand dollars. York River.

^a On the eastern shore.^b Known as the Lower Thoroughfare.

- Baltimore Harbor. Improving harbor at Baltimore, Maryland: Continuing operations for the shortening and deepening the channel to twenty-seven feet at mean low water, one hundred and fifty thousand dollars.
- Elk River. Improving Elk River, West Virginia, five thousand dollars.
- Kanawha River. Improving Great Kanawha River, and operation of works, West Virginia, two hundred thousand dollars.
- Guyandot River. Improving Guyandotte River, West Virginia, three thousand five hundred dollars.
- Little Kanawha River. Improving Little Kanawha River, West Virginia, forty thousand dollars: *Provided*, That no tolls shall be collected by the Little Kanawha Navigation Company for that part of the river improved by the general government.
- Cape Fear River. Improving Cape Fear River, North Carolina, from the ocean to Wilmington, one hundred and forty thousand dollars.
- Provido.* Improving the Cape Fear River from Wilmington to Fayetteville, North Carolina, thirty thousand dollars: *Provided*, That the Secretary of War is directed to expend of the money hereby appropriated, a sum not exceeding ten thousand dollars, to extinguish any claim of right held by any company or corporation, to take tolls or make charges for the navigation of so much of said river as is above described;
- Provido.* *And provided further*, That said claim of right shall be extinguished and released on or before the first day of December, eighteen hundred and eighty-one, and no part of this appropriation shall be expended in the improvement of said river until such claim of right is wholly extinguished and released: *Provided further*, That nothing herein contained shall be taken or held as a waiver on the part of the United States to the exclusive control of navigation of said river relieved from any charges or tolls imposed by any company or corporation.
- Currituck Sound. Improving Currituck Sound, Coanajok Bay, North River and Bar, North Carolina, thirty thousand dollars.
- French Broad River. Improving French Broad River, North Carolina, five thousand dollars.
- Neuse River. Improving Neuse River from its mouth to head of navigation, North Carolina, thirty thousand dollars.
- Pamlico and Tar rivers. Improving Pamlico and Tar Rivers, North Carolina, eight thousand dollars.
- Scuppernong River. Improving Scuppernong River, North Carolina, one thousand dollars.
- Trent River. Improving Trent River, North Carolina, five thousand dollars.
- Yadkin River. Improving Yadkin River, North Carolina, twelve thousand dollars.
- Contentnia Creek. Improving Contentnia Creek, North Carolina, ten thousand dollars.
- Beaufort Harbor. Improving Beaufort Harbor, North Carolina, thirty thousand dollars.
- Lillington River. Improving Lillington River, North Carolina, three thousand dollars.

- Improving Ashley River, South Carolina, one thousand five hundred dollars. Ashley River.
- Improving Great Pedee River, South Carolina, between Little Bluff and Cheraw, six thousand dollars. Great Pedee River.
- Improving Waccemaw River, South Carolina, from its mouth up to Waccemaw Lake, North Carolina, ten thousand dollars. Waccemaw River.
- Improving Town Creek^a, in North Carolina, one thousand dollars. Town Creek.
- Improving Chattahoochee River, Georgia, twenty thousand dollars. Chattahoochee River.
- Improving Coosa River, Georgia and Alabama, sixty thousand dollars. Coosa River.
- Improving Flint River, Georgia, fifteen thousand dollars. Flint River.
- Improving Ockmulgee River, Georgia, five thousand dollars. Ockmulgee River.
- Improving Oconee River, Georgia, two thousand five hundred dollars; of which sum one thousand five hundred dollars to be expended between Dublin and Oconee Bridge. Oconee River.
- Improving Oostenaula and Coosawattee Rivers, Georgia, one thousand dollars. Oostenaula and Coosawattee rivers.
- Improving Savannah River above Augusta, Georgia, eight thousand dollars. Savannah River.
- Improving Apalachicola River, Florida, one thousand five hundred dollars. Apalachicola River.
- Improving Choctawhatchee River, Florida and Alabama, up to Newton, ten thousand dollars. Choctawhatchee River.
- Improving entrance to Cumberland Sound, between Amelia and Cumberland Islands, in Florida and Georgia, one hundred thousand dollars. Cumberland Sound.
- Improving Escambia River, Florida and Alabama, five thousand dollars. Escambia River.
- Improving Saint John's River, Florida, one hundred thousand dollars. St. John's River.
- Improving Pea's [Peace] Creek, in Florida, seven thousand dollars. Peace Creek.
- Improving Withlacooche River, in Florida, seven thousand five hundred dollars. Withlacoochee River.
- Improving Suwanee River, Florida, three thousand dollars. Suwanee River.
- Improving Volusia Bar, Florida, five thousand five hundred dollars. Volusia bar.
- Improving Alabama River, Alabama, twenty thousand dollars. Alabama River.
- Improving Big Sunflower River, Mississippi, four thousand dollars. Big Sunflower River.
- Improving Noxubee River, Mississippi, eight thousand dollars. Noxubee River.
- Improving Pascagoula River, Mississippi, four thousand dollars. Pascagoula River.

^a In Brunswick County, emptying into Cape Fear River about 7½ miles below Wilmington.

- Pearl River. Improving Pearl River below Jackson, Mississippi, twenty-five thousand dollars.
- Improving Pearl River Mississippi, from Jackson to Carthage, two thousand five hundred dollars.
- Tallahatchie River. Improving Tallahatchee River, Mississippi, three thousand dollars; of which sum two thousand dollars shall be expended above the mouth of Cold Water River to Batesville.
- Tombigbee River. Improving Tombigbee River above Columbus, Mississippi, one thousand dollars.
- Yazoo River. Improving Yazoo River, Mississippi, six thousand dollars.
- Amite River. Improving Amite River, Louisiana, five thousand dollars.
- Bayou Courta-bleau. Improving Bayou Courtableau from Port Barre to Atchafalaya, Louisiana, seven thousand five hundred dollars.
- Bayou Teche. Improving Bayou Teche from Saint Martinville to Port Barre, Louisiana, twenty thousand dollars.
- Bayou Terrebonne. Improving Bayou Terrebonne, Louisiana: Completing improvement, eight thousand eight hundred dollars.
- Red River. Removing raft in Red River and closing Tone's Bayou, Louisiana, ten thousand dollars.
- Removing obstructions from Red River, Louisiana, ten thousand dollars. And the Secretary of War is hereby directed to cause a thorough survey to be made of the mouth of Red River, and a plan for its permanent improvement to be reported to Congress on or before the first Monday of December, eighteen hundred and eighty-one, with estimates of cost; and said survey and plan to be paid for out of the unexpended balance already appropriated for the mouth of Red River.
- Tangipahoa River. Improving Tangipahoa River, Louisiana, two thousand dollars.
- Vermillion River. Improving Vermillion River, Louisiana: Completing improvement, four thousand nine hundred dollars.
- Warrior and Tombigbee rivers. Improving Warrior and Tombigbee Rivers, Alabama and Mississippi, to be expended in the same proportions as the appropriation under the act of June, eighteen hundred and eighty, twenty-five thousand dollars.
- Aransas Pass. Improving Aransas Pass and Bay, up to Rockport and Corpus Christi, Texas, eighty thousand dollars.
- Brazos River, channel at mouth of. Improving channel over bar at mouth of Brazos River, Texas, forty thousand dollars.
- Pass Cavallo Inlet. Improving Pass Cavallo Inlet into Matagorda Bay, Texas, sixty thousand dollars.
- Ship channel, Galveston Bay. Improving ship-channel, Galveston Bay, Texas, fifty thousand dollars.
- Neches River. Improving Neches River, Texas, three thousand dollars.
- Sabine Pass and Blue Buck bar. Improving Sabine Pass and Blue Buck Bar, Texas, one hundred and fifty thousand dollars.
- Sabine River. Improving Narrows of Sabine River above Orange, Texas, and to deepen channel at its mouth, seven thousand dollars.
- Trinity River. Improving Trinity River, Texas, ten thousand dollars.

Improving Arkansas River between Fort Smith, Arkansas, and Wichita, Kansas, twenty-four thousand dollars. Arkansas River.

Improving Arkansas River at Pine Bluff, Arkansas, twenty-three thousand dollars.

Improving Black River, Arkansas and Missouri, six thousand dollars, to be applied from Poplar Bluff. Black River.

Improving Fourche Le Fevre River, Arkansas, three thousand dollars. Fourche Le Fevre River.

Improving Ouachita River, Arkansas and Louisiana, twelve thousand dollars. Ouachita River.

Improving Saline River^[a], Arkansas, five thousand dollars. Saline River.

Improving White River between Jacksonport and Buffalo Shoals, Arkansas, eight thousand dollars. White River.

Improving White and Saint Francis Rivers, Arkansas, eight thousand dollars.

Improving Big Hatchee River, Tennessee, three thousand five hundred dollars. Hatchee River.

Improving Caney Fork River, Tennessee, four thousand dollars. Caney Fork River.

Improving Clinch River Tennessee, three thousand dollars. Clinch River.

Improving Cumberland River above Nashville, Tennessee: From Nashville to Kentucky State line, fifteen thousand dollars; from Kentucky line to Smith's Shoals, fifteen thousand dollars; at Smith's Shoals, completing improvement, ten thousand dollars. Cumberland River.

Improving Cumberland River below Nashville, Tennessee, fifteen thousand dollars.

Improving Duck River, Tennessee, three thousand dollars. Duck River.

Improving French Broad River above Knoxville, Tennessee, three thousand five hundred dollars. French Broad River.

Improving Hiwassee River, Tennessee, one thousand five hundred dollars. Hiwassee River.

Improving Obed's [Obey] River, Tennessee, two thousand five hundred dollars. Obey River.

Improving Tennessee River above Chattanooga, Tennessee, seven thousand dollars. Tennessee River.

Improving Red River from its mouth to Port Royal, in Montgomery County, Tennessee, five thousand dollars. Red River.

Improving Tennessee River below Chattanooga, including Muscle Shoals and shoal at Reynoldsburgh; Tennessee and Alabama, two hundred and fifty thousand dollars. Tennessee River, including Muscle shoals.

Improving Kentucky River from its mouth to Three Forks, Kentucky, one hundred and twenty-five thousand dollars. Kentucky River.

Improving Big Sandy River from Catlettsburgh, Kentucky, to head of navigation, fifty thousand dollars; of which sum forty-six thousand dollars shall be expended at Louisa, and four thousand dollars in the continuation of works on the upper river. Big Sandy River.

^a A tributary of Ouachita River.

- Sandusky River. Improving Sandusky River, Ohio seven thousand five hundred dollars.
- Wabash River. Improving Wabash River, Indiana, fifty thousand dollars, one-half of which is to be used on the river above Vincennes.
- White River. Improving White River, Indiana, from Wabash River to Portersville, and to falls on West Fork, twenty thousand dollars.
- Illinois River. Improving Illinois River, Illinois, two hundred and fifty thousand dollars.
- Mississippi River. Improving Mississippi River at and above Alexandria, Missouri, six thousand dollars.
- Improving Mississippi River at or near Cape Girardeau and Minton's Point, Missouri, ten thousand dollars.
- Improving Mississippi River from Des Moines Rapids to mouth of Illinois River, Illinois and Missouri, one hundred and seventy-five thousand dollars; and the sums of money heretofore appropriated for the improvement of the Mississippi between the Illinois and Missouri Rivers, and unexpended, are hereby reappropriated, and shall be applied to the improvement of the harbor and Mississippi River at Alton.
- Improving Mississippi River between mouths of the Illinois and Ohio Rivers, Illinois and Missouri, six hundred thousand dollars.
- Removing bar in Mississippi River opposite Dubuque, Iowa, five thousand dollars.
- Completion of work of removing sand-bar in Mississippi River opposite Guttenberg, Iowa, five thousand dollars.
- Improving Mississippi River at Hannibal, Missouri, twenty thousand dollars.
- Improving Mississippi River at Natchez and Vidalia, Mississippi and Louisiana, fifty thousand dollars.
- Improving Mississippi River above Falls of Saint Anthony, Minnesota, ten thousand dollars.
- Improving Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Missouri, Illinois, and Wisconsin, two hundred thousand dollars.
- Quincy Bay. Improving Quincy Bay, Illinois, ten thousand dollars.
- Gauging waters of Mississippi River. Annual expense of gauging the waters of the Mississippi River and its tributaries: Continuing observations of the rise and fall of the river and its chief tributaries, as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars.
- 1871, res. 40; 16 Stat., 598.
- Upper Mississippi River. Improving Upper Mississippi River: Operating snag-boat and building light-draught steamer, twenty-five thousand dollars.
- Rock Island Rapids. Improving Rock Island Rapids, Mississippi River, Iowa and Illinois: Completing improvement, eight thousand dollars.
- Des Moines Rapids. Improving Des Moines Rapids, Iowa and Illinois, twenty-five thousand dollars. And hereafter, for the purpose of operating and keeping in repair the Des Moines Rapids Canal, and Saint Mary's Falls Canal, and
- Des Moines Rapids Canal. St. Marys Falls Canal.

Saint Clair Flats Canal, and the Louisville and Portland Canal, the Secretary of War is authorized to draw his requisition on the Secretary of the Treasury from time to time, which requisition shall be paid out of any money in the Treasury not otherwise appropriated^[a].

St. Clair Flats Canal.
Louisville and Portland Canal.
Vol. 23, p. 147.
Post, p. 415.
Vol. 26, p. 455.
Post, p. 535.
Osage River.

Improving the Osage River, Kansas and Missouri, twenty thousand dollars.

Improving Cuivre River, Missouri, from mouth to Chain of Rocks, and removing snags and obstructions, five thousand dollars.

Cuivre River.

Improving Gasconade River, Missouri, ten thousand dollars.

Gasconade River.

Improving Missouri River at Atchison, Kansas, twenty thousand dollars.

Missouri River.

Improving Missouri River from Kansas City to its mouth, thirty-five thousand dollars.

Improving Missouri River at Brownville, Nebraska, ten thousand dollars.

Improving Missouri River at Cedar City, Missouri, fifteen thousand dollars.

Improving Missouri River at Council Bluffs, Iowa, and at Omaha, Nebraska, thirty thousand dollars.

Improving Missouri River at Eastport, Iowa, and at Nebraska City, Nebraska, twenty thousand dollars.

Improving Missouri River at Plattsmouth, Nebraska, ten thousand dollars.

Improving Missouri River at or near Fort Leavenworth, Kansas, eight thousand dollars.

Improving Missouri River at and near Glasgow, Missouri, twenty thousand dollars.

Improving Missouri River at and near Kansas City, Missouri, twenty thousand dollars.

Improving Missouri River at Lexington, Missouri, ten thousand dollars.

Improving Missouri River at Saint Charles, Missouri, fifteen thousand dollars.

Improving Missouri River at and near Saint Joseph, Missouri, twenty thousand dollars.

Improving Missouri River at Sioux City, Iowa: For improvement of channel, seven thousand dollars.

Improving Missouri River at Vermillion, Dakota, fifteen thousand dollars.

Improving Missouri River above mouth of Yellowstone River, Dakota, forty thousand dollars.

Survey of Missouri River from its mouth to Fort Benton, Montana: Continuing survey above Sioux City, thirty thousand dollars.

Survey of Missouri River.

^aSection 14 of the river and harbor act approved September 19, 1890, makes the provisions of this section applicable to the Des Moines Rapids Canal dry dock. All such expenses are now defrayed from the permanent indefinite appropriation provided by section 4 of the river and harbor act approved July 5, 1884.

- Detroit River. Improving Detroit River, Michigan, fifty thousand dollars.
- Saginaw River. Improving Saginaw River, Michigan, ten thousand dollars.
- St. Marys River and St. Marys Falls Canal. Improving Saint Mary's River and Saint Mary's Falls Canal, Michigan: Completing improvement, one hundred and fifty thousand dollars.
- St. Anthony's Falls. Repairs and contingencies of public works at Saint Anthony's Falls, Minnesota: To meet repairs necessary, present and prospective, fifteen thousand dollars, which shall be available immediately after the passage of this act.
- St. Croix River. Improving Saint Croix River below Taylor's Falls, Wisconsin, eight thousand dollars.
- Red River of the North. Improving Red River of the North, Minnesota and Dakota, eighteen thousand dollars.
- Goose Rapids. Constructing a lock and dam at Goose Rapids, on the Red River of the North, Minnesota and Dakota, twenty thousand dollars.
- Yellowstone River. Improving Yellowstone River, Montana and Dakota, twenty thousand dollars.
- Coos Bay Harbor. Continuing improvement at the entrance of Coos Bay Harbor, Oregon, thirty thousand dollars.
- Canal, Cascades of Columbia River. Canal around Cascades of Columbia River, Oregon, one hundred thousand dollars.
- Upper Columbia River. Improving Upper Columbia River, including Snake River, Oregon, fifteen thousand dollars.
- Lower Willamette. Improving Lower Willamette and Columbia Rivers, from Portland, Oregon, to the sea, including bar at mouth of Columbia River, Oregon, forty-five thousand dollars.
- Upper Willamette. Improving Upper Willamette and Yamhill Rivers, Oregon, fifteen thousand dollars.
- Petaluma Creek. Improving Petalumas Creek, California, eight thousand dollars.
- Sacramento River. Improving Sacramento River, California, sixty thousand dollars.
- San Joaquin River. Improving San Joaquin River, California, forty thousand dollars; ten thousand dollars of which amount may be used in the discretion of the engineer in the improvement of Mormon Slough.
- Examinations and surveys at South Pass of Mississippi River. Examinations and surveys at South Pass of Mississippi River: To ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at South Pass of the Mississippi River, and to enable the Secretary of War to report during the maintenance of the work, ten thousand dollars; and also to ascertain by soundings whether and to what extent, within a distance of five miles from the present mouth of the river at the South Pass, the gulf has filled up by deposits from the river since the construction of the Eads jetties.
- Fox and Wisconsin rivers. Improving Fox and Wisconsin Rivers, Wisconsin, one hundred and twenty-five thousand dollars; of which sum fifty thousand dollars shall be expended in continuing the improvement of the Wisconsin River, and seventy-five

thousand for continuing the improvement of the Fox River.

Improving Calcasieu Pass, Louisiana, twelve thousand dollars. Calcasieu Pass and River.

Improving Calcasieu River, Louisiana, from Phillips Bluff to its mouth, three thousand dollars.

Improving Savannah River, Georgia, fifteen thousand dollars. Savannah River.

Improving Mississippi River at Andalusia, Illinois, six thousand dollars. Mississippi River.

Improving Mississippi River at Louisiana, Missouri, ten thousand dollars.

Repairing breakwater on the Saint Croix River near Calais, four thousand dollars. St. Croix River.

Improving Altamaha River, Georgia, five thousand dollars. Altamaha River.

Improving Wappoo Cut, South Carolina, ten thousand dollars. Wappoo Cut.

Improving Neabsco Creek, Virginia, five thousand dollars. Neabsco Creek.

Improving Bayou Bartholomew, Louisiana and Arkansas, eight thousand dollars. Bayou Bartholomew.

Improving Tensas River, Louisiana, three thousand dollars. Tensas River.

Improving Bayou Black^a, in Louisiana, ten thousand dollars. Bayou Black.

Improving Bayou Boeuf, Louisiana, five thousand dollars. Bayou Boeuf.

Improving Current River, Missouri and Arkansas, from Doniphan to its mouth, two thousand dollars. Current River.

Improving Rancocas River, New Jersey, ten thousand dollars. Rancocas River.

Improving Christiana River and Wilmington Harbor, Delaware: Deepening the channel and improving the harbor of Christiana River from the Delaware River to and above the city of Wilmington, in accordance with the surveys and plans of the United States Engineer Department, fifty thousand dollars. Christiana River.

Improving Chester Creek, Pennsylvania, three thousand dollars. Chester Creek.

Improving Mattawan Creek, New Jersey, fifteen thousand dollars. Mattawan Creek.

Improving Raritan Bay, New Jersey, from Perth Amboy and South Amboy to the main ship-channel off Great Kiln, fifty thousand dollars. Raritan Bay.

Improving Newport Harbor, Rhode Island, twenty-five thousand dollars. Newport Harbor.

Improving Tradewater River, Kentucky, open navigation, three thousand dollars. Tradewater River.

Improving Cumberland River, Kentucky, above mouth of Jelico, ten thousand dollars. Cumberland River.

^a Discharges into Bayou Boeuf, which latter empties into Berwick Bay (an enlargement of Atchafalaya River) at Morgan City.

Buffalo Bayou.	Improving Buffalo Bayou, Texas: To secure a channel of one hundred feet, twenty-five thousand dollars.
Keweenaw Harbor.	Improving Keweenaw Harbor, Wisconsin, five thousand dollars.
Niagara River.	Improving Niagara River, New York, five thousand dollars.
Portland Harbor.	Improving Portland Harbor, Maine, twenty thousand dollars.
Scituate Harbor.	Improving Scituate Harbor, Massachusetts, ten thousand dollars.
Moosabec bar.	Improving Moosabec Bar at Jonesport, Maine, ten thousand dollars.
Wareham Harbor.	Improving Wareham Harbor, Massachusetts, ten thousand dollars.
Canarsie Bay.	Improving Canarsie Bay, New York, five thousand dollars.
Sheepshead Bay.	Improving Sheepshead Bay, New York, five thousand dollars.
Salem River.	Improving Salem River, New Jersey, three thousand dollars.
Susquehanna River.	Improving Susquehanna River, Pennsylvania, above Richard's Island, fifteen thousand dollars.
	Improving Susquehanna River above and below Havre de Grace, Maryland, fifteen thousand dollars.
Archers Hope River.	Improving Archer's Hope River, Virginia, five thousand dollars.
Wateree River.	Improving Wateree River, South Carolina, eight thousand dollars.
Santee River.	Improving Santee River, South Carolina, by deepening and straightening its outlet to Winyah Bay through Mosquito Creek, twenty-two thousand dollars.
Pensacola Harbor.	Improving Pensacola Harbor, Florida, twenty thousand dollars.
Chefuncte River.	Improving Tchefuncte River, Louisiana, one thousand five hundred dollars.
Tickfaw River.	Improving Tickfaw River, Louisiana, two thousand dollars.
Bayou Teche.	Improving Bayou Teche by connecting same with Grand Lake at Charenton, Louisiana, twenty-five thousand dollars.
Brazos Santiago Harbor.	Improving bar and harbor at Brazos Santiago, Texas, seventy-five thousand dollars.
Yalobusha River.	Improving Yallabusha River, Mississippi, three thousand five hundred dollars.
Tchula Lake.	Improving Tchula Lake, Mississippi, three thousand dollars.
Louisville and Portland Canal.	For the expenses of operating and maintaining the Louisville and Portland Canal for the fiscal year ending June thirtieth, eighteen hundred and eighty-one, forty-two thousand dollars, which sum shall be immediately available.
Yaquina Bay.	Improving entrance to Yaquina Bay, Oregon, ten thousand dollars.
Cowlitz River.	Improving Cowlitz River, Washington Territory, one thousand dollars.

Of the amount now available for the improvement of Bayou La Fourche, Louisiana, the sum of five hundred dollars, or so much thereof as may be necessary, shall be expended in the removal of brick pier at Donaldsonville. Pier at Donaldsonville, removal of.

Improving Richmond Harbor, Kennebec River, Maine, ten thousand dollars; of which sum six thousand dollars shall be expended for wing dams and dredging at the head of Swan's Island and at Hatch's Rock, and four thousand dollars in dredging and deepening the channel at the foot of Swan's Island according to the plan recommended by Lieutenant Russell. Richmond Harbor, Kennebec River.

For reservoirs upon the headwaters of the Mississippi River and its tributaries, one hundred and fifty thousand dollars; and this sum, together with the sum of seventy-five thousand dollars heretofore appropriated for the construction of a dam at Lake Winnibigoshish, shall be expended at such places on said headwaters of the Mississippi River and its tributaries as the Secretary of War shall determine: *And it is provided*, That compensation for any private property taken or appropriated for any of said improvements, and all damages to private property caused by the construction of any of said dams, by flowage or otherwise, shall be ascertained and determined under and in accordance with the laws of the State in which such private property is situated. Reservoirs upon headwaters of Mississippi River.

And the Secretary of the Interior is hereby authorized and directed to ascertain what, if any, injury is occasioned to the rights of any friendly Indians, occupying any Indian reservation, by the construction of any of said dams, or the cutting or the removing of trees or other materials from any such reservation for the construction or erection of any of said dams, and to determine the amount of damages payable to such Indians therefor; and all such damages to private property and to friendly Indians, when ascertained and determined in the manner herein directed and provided, shall be paid by the United States: *Provided, however*, That such damages shall not exceed ten per centum of the sums hereby and heretofore appropriated for the construction of said reservoirs. Proviso. Damages to private property, compensated for under State laws.

Improving Sumpawamus Inlet, New York, five thousand dollars. Rights of Indians preserved and protected.

Improving the harbor at the entrance of Saint Jerome's Creek, Maryland, six thousand five hundred dollars. Sumpawamus Inlet.

For the improvement of Saint Jones River, in the State of Delaware, five thousand dollars. St. Jeromes Creek Harbor.

Such parts of the money appropriated by this act for any particular improvement requiring locks and dams as may be necessary in the prosecution of such improvement may be expended in the purchase, voluntary or by condemnation, as the case may be, of necessary sites: *Provided*, That such expenditure shall be under the direction of the Secretary of War: *And provided further*, That if the owners of such lands shall refuse to sell them at reasonable prices, Purchase of sites for locks and dams.

Proviso.

Proviso.

Title, how perfected.

Manner of making improvements.

Proposals.

Contracts, after advertisement.
Lowest bidder.

Examinations and surveys.

then the prices to be paid shall be determined and the title and jurisdiction procured in the manner prescribed by the laws of the State in which such lands or sites are situated. It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements, other than surveys and estimates, in carrying on the various works, as far as can be without actual detriment to the interest of the government, by contract. Where such works cannot be done by contract without injury to the public interest, they may be prosecuted by hired labor. Where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution of the work according to such contract, and for the proper payment of all liabilities incurred in the prosecution thereof for labor and material.

* * * * *

SEC. 3. That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, and estimates of cost of improvements proper, to be made at the following points, namely:

Harbor of San Luis Obispo, California.

Tombigbee River, Mississippi, from Fulton to Warren's Mill.

The Chattahoochee River, in Georgia, between West Point and Bolton, on the Western and Atlantic Railroad, so as to complete the survey of that portion of said river.

Bear Creek, running into Yazoo River.

Harbor at Port Henry, on Lake Champlain.

Frankford Creek from its mouth in the Delaware River to Frankford Avenue.

Five Mile Point, above Bridesburg, Delaware River.

Mouth of the Mispillion, Delaware.

Mokelumne River, California, from its mouth at or near Woodbridge.

New York Bay between Sandy Hook and Coney Island Point.

Newton Creek, Camden County, from Delaware River to head of navigation.

Mantua Creek, Gloucester County, from Delaware River to head of navigation.

Maurice River from Delaware Bay to Millville, Cumberland County.

Salem and Cohansey Rivers, New Jersey.

Completing survey of Harlem River and through the Harlem Kilns^a to the East River.

Survey for harbor of refuge in Lake Pepin, at Stockholm, Wisconsin, and Lake City, Minnesota.

^a Known also as Bronx Kills.

Beaver Bay, Minnesota, to ascertain the cost and practicability of making it a harbor of refuge.

Grand Portage Bay and Wans-wau-goising^a Bay, Minnesota, to determine which, if either, should be made a harbor of refuge.

Sackett's Harbor, New York.

Matagorda Bay at the mouth of Saint Mary's Bayou, near the town of Matagorda, Texas.

Harbors of Madison and Clinton, Connecticut.

Edgartown Harbor and South Beach, Massachusetts.

Staunton River from Brook Neal, in Campbell County, to mouth of Pig River, Virginia.

Roanoke River from Weldon North Carolina, to Clarks-ville, Virginia.

Bear Creek, running from Northeast Mississippi into the Tennessee River.

To deepen the channel of the Harrisecket River from Weston's Point to Freeport Landing in Freeport, Maine.

The channel of Broad Creek on the west side of Kent Island, Maryland.

Harbor of Brunswick, on the Androscoggin River.

Buzzard's Bay and Barnstable Bay, Massachusetts, at the entrance of the proposed Cape Cod Canal.

Sabine Pass, Texas, through Sabine Lake and River to Orange and Sabine Lake, and the Neches River to Beaumont, to ascertain the cost and practicability of a deep-water channel from Sabine Pass to Orange and Beaumont.

Old Town Creek, Mississippi.

Bar at mouth of Winyah Bay, near Georgetown, South Carolina.

Little Red River in Arkansas.

And the Secretary of War is hereby directed to cause to be made examinations and surveys, or both, and estimates of the cost of the further improvements necessary to be made in the Savannah River and Harbor to increase the depth of the water in said river and harbor from the bar up to the city to twenty-two feet, and to make an estimate of the cost of widening the channel of the Savannah River opposite the city to six hundred feet of uniform depth with the balance of the channel.

Young's, Lewis' and Clarke's, and Skipanon Rivers, entering into Young's Bay, in the county of Clatsop, near mouth of Columbia River, Oregon.

Snake River from Lewiston to the mouth of Salmon River, Idaho Territory.

Corsica Creek, Maryland.

Harbor at mouth of Cedar River, on Green Bay, Michigan.

Lynn Harbor, Massachusetts.

Merrimac River from Lawrence, Massachusetts, to Manchester, New Hampshire.

^a The correct name is Wauswaugoning.

Channel between islands of North Hero and South Hero, Lake Champlain.

Little Tennessee River from its mouth on the Holston or Big Tennessee River to the mouth of Tellico River.

Dog Island Harbor, harbor of Key West, Crystal River, La Grange Bayou up to Freeport, Manatee River, and Crooked [Carrabelle] River, Florida.

Indian River, Florida, at the north end, in view of opening a passage into the [Mosquito^a] lagoon one-half mile east.

From a point between Ellis Island and the docks of New Jersey Central Railroad, to a point between Robbins' Reef Light and Constable Hook, in waters of New York Bay, New Jersey.

Big Black River, Mississippi.

Outlet of harbor of Ship Island.

Harbor at Boloxi [Biloxi], Mississippi.

Harbor at Pascagoula, Mississippi^b.

Upper thoroughfare^c leading into Tangier Sound, Deil's Island, and Rock Creek, Maryland.

Fish Bend, near Fort Chartres, in the Mississippi River.

Murder Kiln [Murderkill River], Delaware.

Delaware River.

Potomac and Anacostia Rivers, in the vicinity of Washington, District of Columbia, with reference to the improvement of navigation, the establishment of the harbor-line, and the raising of the flats, so far as their improvement may be necessary to the improvement of navigation and the establishment of the harbor-line.

Mouth of Cedar River, Green Bay, Michigan.

Greenport Harbor, New York.

Survey for harbor of refuge at New Buffalo, Michigan.

The headwaters of the Cannon River, in Minnesota, with a view that the same may be added to the reservoir system of the Upper Mississippi.

The water connection between the Waccamaw and Cape Fear Rivers, with the view of ascertaining if a continuous inland water connection can not thereby be established.

Toledo, Ohio, for a straight channel to Lake Erie.

For harbor at Caseville, Saginaw Bay, Lake Huron.

The Calumet River from South Chicago to the village of Pullman, on Lake Calumet.

For a further survey of James River, for the purpose of ascertaining the practicability and cost of procuring a channel of twenty-five feet at full tide from Richmond to the mouth of the river.

^aThe passage connecting these two waterways is known as the Haulover Canal, or the Haulover.

^bThe report upon this item stated that "this harbor was found to be good enough," but that the object desired seemed to be the improvement of Horn Island Pass. Consequently the project presented in the report provided only for the improvement of Horn Island Pass, from Horn Island Harbor to the Gulf.

^cThis passage is between Deal Island and the mainland.

Survey of Upper Machodoc Creek, a tributary of Potomac River.

Survey of Urbana Creek, a tributary of Rappahannock River, from the village of Urbana to the Oaks.

The harbor of Mamaroneck, New York.

Cumberland River at Smith's Shoals, in the State of Kentucky, to ascertain the practicability and the cost of a canal, with locks and dams, from the head to the foot of said shoals.

The harbor at the Delaware Breakwater, and the entrance thereto.

Indian River, in the State of Delaware, from its mouth to Millsborough.

Survey of the Clarion River from its mouth to Ridgway, Pennsylvania.

From Brazos de Santiago through Laguna Madre to Point Isabel, Texas, to ascertain the cost and practicability of a deep-water channel from the anchorage at Brazos de Santiago to the railroad wharf at Point Isabel.

Survey for breakwater and harbor of refuge at Milford Connecticut.

Entrance to Gray's Harbor, Washington Territory.

Between Baker's Bay^a and Shoalwater [Willapa] Bay, Washington Territory, for canal for light-draught vessels.

Missouri River at or near Arrow Rock.

For survey of Nishnabotana [River] from Hamburg, Iowa, to its junction with the Missouri.

Skipton Creek, Maryland.

Bush River, Maryland, from Harford Furnace to Chesapeake Bay.

Licking River from its mouth to Falmouth, in Kentucky.

Oregon Inlet, in Dare County, in North Carolina.

Survey of Chehalis River, in Washington Territory.

Whiteoak, Meherrin, and New Rivers, in North Carolina.

SEC. 4. That for the examinations and surveys herein provided for, and for incidental repairs of harbors for which there is no special appropriation, the sum of fifty thousand dollars is hereby appropriated out of any money in the Treasury not otherwise appropriated; and in every case where examinations or surveys are made, the report thereon shall embrace such information concerning the commercial importance, present and prospective, of the improvement contemplated thereby, and such general commercial statistics as the Secretary of War may be able to procure.

Appropriation.

Report.

Approved, March 3, 1881.

^aPart of Columbia River.

Mar. 4, 1882.
Vol. 22, p. 7.

CHAP. 22.—An Act Making an appropriation for continuing the improvements of Galveston Harbor, State of Texas.

Galveston Har-
bor, Tex.

Im provement
of.

Appropriation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred thousand dollars be, and the same is hereby, appropriated, out of any moneys in the Treasury not otherwise appropriated, for the purpose of continuing the improvements of Galveston Harbor, in the State of Texas, which improvements are now being prosecuted under the direction of the Secretary of War, and the appropriation for which is wholly insufficient to continue the work to the end of the current fiscal year; and the expenditure of the sum hereby appropriated is placed under the direction and control of the Secretary of War.

Approved, March 4, 1882.

Mar. 6, 1882.
Vol. 22, p. 7.

CHAP. 24.—An Act To provide for certain of the most urgent deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen-hundred and eighty-two, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * **

* * * * *

Fishing bat-
tery, Susquehan-
na River.

The Secretary of War is authorized to use the unexpended balance of the appropriations for the improvement of the Susquehanna River above and below Havre de Grace in the construction of the channel and breakwaters of the "fishing battery" below Havre de Grace.

* * * * *

Approved, March 6, 1882.

Mar. 21, 1882.
Vol. 22, p. 30.

CHAP. 44.—An Act Appropriating one hundred thousand dollars for continuing the work on Davis Island Dam.

Davis Island
dam, Ohio River.

Appropriation.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one hundred thousand dollars, be, and the same hereby is, appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of continuing the work on the Davis Island Dam in the Ohio River, and to be expended under the direction of the Secretary of War, and in anticipation of part of the appropriation for such purpose in the regular river and harbor act.

Approved, March 21, 1882.

CHAP. 112.—An Act To amend section fifty-two hundred and fifty-four, title sixty-three, Revised Statutes of the United States, concerning the use of piers and crib in the Mississippi River.

May 1, 1882.
Vol. 22, p. 52.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section fifty-two hundred and fifty-four, title sixty-three, of the Revised Statutes of the United States shall be amended by adding after the words "Mississippi River," in the first line of said section, the words "and the Saint Croix River in the States of Wisconsin and Minnesota."

St. Croix River,
Wis. and Minn.
R. S. 5254, 1016,
amended,
1873, c. 278.
Ante, p. 220.

Approved, May 1, 1882.

CHAP. 119.—An Act Making an immediate appropriation for the removal of obstructions at Hell Gate, New York.

May 4, 1882.
Vol. 22, p. 58.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of fifty thousand dollars be and is hereby appropriated, to be paid out of any money in the Treasury not otherwise appropriated, for the removal of obstructions in East River, Hell Gate, New York, the same to be expended under the direction of the Secretary of War, and to be immediately available.

Removal of ob-
structions from
Hell Gate, N. Y.

Appropriation.

Approved, May 4, 1882.

CHAP. 231.—An Act For the government and control of the harbor of refuge at Sand Beach [Harbor Beach], Lake Huron, Michigan.

June 19, 1882.
Vol. 22, p. 107.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act, and until the completion of the work of construction the Secretary of War is directed to assume full control over the harbor of refuge on Lake Huron at Sand Beach [Harbor Beach], Michigan, now in course of construction by the United States Government, and of the piers, breakwaters, docks, wharves, buildings, and other improvements made by the United States appertaining to said harbor of refuge, and to facilitate the use thereof, including the channels of and approaches to said harbor of refuge, so far as may be necessary to the protection and use of said harbor and the improvements aforesaid; and said Secretary of War, for the purpose aforesaid, and for the preservation of said harbor in the interests of commerce, shall prescribe such regulations not inconsistent with the laws of the United States respecting the use of said harbor and its channels, and the approaches thereto, and respecting the use of the piers, breakwaters, docks, wharves, buildings, and other improvements of said harbor, made by the United States, as he shall deem needful to fully protect and preserve the said harbor and its several channels and approaches, and the said piers, break-

Harbor of ref-
uge, Sandbeach
(Harbor Beach),
Mich.

Secretary of
War to have full
control until
completion of
work.

Regulations for
preservation of
work and im-
provements.

waters, docks, wharves, buildings, and other improvements. Such regulations shall be promulgated by publication thereof for ten days consecutively in one daily newspaper published in each of the cities of Detroit, Port Huron, Buffalo, Cleveland, and Chicago, and said regulations may be changed in like manner from time to time. He shall also cause four copies of such regulations to be kept posted in conspicuous places on said piers and breakwaters.

Custodian to be appointed.

SEC. 2. That the Secretary of War shall appoint, upon the recommendation of the engineer officer in charge of the work, a custodian of said harbor and the improvements aforesaid, whose duty it shall be to preserve and protect the same under the regulations made as aforesaid by the Secretary of War, and to enforce the observance of said regulations and to guard and preserve the property of the United States at said harbor of refuge. Said custodian shall also have power to direct and regulate the stationing and anchoring of steam vessels and water-craft in said harbor, and the mooring thereof at the piers, breakwaters, docks, and wharves of said harbor, and the laying out and discharging of cargoes and ballast in said harbor, piers, breakwaters and docks; and it shall be the duty of said custodian to report to the United States District Attorney for the eastern district of Michigan all violations of this act, and of the said regulations prescribed by the Secretary of War; and said custodian shall receive such compensation, not exceeding one hundred and fifty dollars per month, as the Secretary of War may allow.

Duties.

Compensation.

Penalties for violation of regulations.

SEC. 3. That it shall be the duty of all persons using or navigating said harbor, its channels and approaches, or using any of the piers, breakwaters, docks, wharves, or other improvements made by the United States, to observe the regulations prescribed by the Secretary of War as aforesaid; and any person who shall willfully or negligently strand or sink any steam-vessel, boat, or craft in said harbor, or in the channels or approaches, or who shall willfully obstruct or oppose the custodian of said harbor in the enforcement of the regulations aforesaid, or who shall willfully or negligently, or by failure or neglect to observe the regulations prescribed by the Secretary of War for the use thereof, obstruct or impair said harbor, or cause any impediment, injury, filling up, or shoaling therein, or shall deposit any earth, ashes, stone, ballast, or other substances in said harbor, channels or approaches tending to obstruct or impair the navigation thereof, or who shall willfully damage or injure the piers, breakwaters, wharves, docks, or other improvements of said harbor made by the United States, or who shall fail to obey and observe any of said prescribed regulations, shall be liable to a penalty of not less than fifty dollars nor more than five hundred dollars, to be recovered by information or by action of debt in the District Court of the United States for the eastern

district of Michigan, with costs of suit, and shall, in addition thereto, be liable to the United States, or to any person aggrieved by such obstructions, or injuries, or unlawful acts or omissions in a civil action for all damages occasioned thereby, or by any of said unlawful acts, to said United States or such aggrieved person. And if such damage or injury to said harbor, channels, approaches, piers, breakwaters, docks, wharves, and other property of the United States in said harbor of refuge be committed by any steamer, vessel, or water-craft, or by the master or person in charge thereof, or if such master or other person in charge of such vessel shall willfully violate the regulations aforesaid, the aforesaid penalty of not less than fifty dollars nor more than five hundred dollars shall be incurred, and such vessel shall be liable for the penalty aforesaid, and may be proceeded against by way of libel for the recovery thereof in any court of the United States within whose jurisdiction such vessel may be found.

SEC. 4. That the Secretary of War may, in his discretion, purchase or hire a steam launch or tug, to be stationed at and used about said harbor, under the direction of said custodian, for the purpose of enforcing the provisions of this act; and such a sum as may be necessary, not exceeding ten thousand dollars, is hereby appropriated for the purchase or hire of said steam launch; and the expense of running and maintaining said launch or tug and the salary of the custodian shall be paid out of the appropriation made for said harbor of refuge.

Steam launch authorized for harbor duty.

Appropriation.

SEC. 5. That after the completion of said harbor by the United States Government the control shall be transferred to the Secretary of the Treasury.

Transfer of works and improvements to Secretary of Treasury.

Approved, June 19, 1882.

CHAP. 364.—An Act Granting to certain parties right of way over lands and waters of the United States.

July 31, 1882.
Vol. 22, p. 181.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That Davidson B. Penn, of New Orleans, Louisiana, and his associates, under the name and style of the St. Tammany Water Works Company," or such other style as they may adopt, be, and are hereby, granted the right of way to lay conduits, pipes, arches, and aqueducts under the waters of Lake Pontchartrain to connect its northern shores with the city of New Orleans, and over and under any of the public waters or lands of the United States between New Orleans and said shore of said lake: *Provided*, That every part of such pipes, aqueducts, or other constructions shall be at least ten feet below the surface of said waters at mean low tide: *Provided, also*, That if at any time the constructions of said company shall in any

St. Tammany Water Works Co., of New Orleans, granted right of way to lay aqueducts, etc., under waters of Lake Pontchartrain, etc.

Provisos.

way obstruct or interfere with the free and safe navigation of any of said waters, such constructions shall be removed or changed by the company upon notification by the Secretary of War.

Approved, July 31, 1882.

Aug. 2, 1882.
Vol. 22, p. 191.

CHAP. 375.—An Act Making appropriations for the construction, repair, and preservation of certain works on rivers and harbors, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, and to be expended under the direction of the Secretary of War, for the construction, completion, repair, and preservation of the public works hereinafter named:

Appropriations
Rivers and har-
bors:

- Portland Har-
bor. Improving harbor at Portland, Maine: Continuing im-
provement, thirty-five thousand dollars.
- Richmond Har-
bor. Improving harbor at Richmond, Maine: Continuing im-
provement, ten thousand dollars.
- Rockland Har-
bor. Improving harbor at Rockland, Maine: Constructing
breakwaters, forty thousand dollars.
- Portsmouth
Harbor. Improving harbor at Portsmouth, New Hampshire: Con-
tinuing improvement, seventeen thousand dollars.
- Burlington
Harbor. Improving harbor at Burlington, Vermont: Continuing
improvement, twelve thousand dollars.
- Swanton Har-
bor. Improving harbor at Swanton, Vermont: Continuing
improvement, four thousand five hundred dollars.
- Boston Harbor. Improving harbor at Boston, Massachusetts: Completing
improvement, ninety-six thousand five hundred dollars.
- Nantucket
Harbor. Improving harbor at Nantucket, Massachusetts: Con-
tinuing improvement, twenty-five thousand dollars.
- Newburyport
Harbor. Improving harbor at Newburyport, Massachusetts: Con-
tinuing improvement, forty thousand dollars.
- Plymouth Har-
bor. Improving harbor at Plymouth, Massachusetts: Contin-
uing improvement, fourteen thousand dollars.
- Provincetown
Harbor. Improving harbor at Provincetown, Massachusetts: Con-
tinuing improvement, five thousand dollars.
- Scituate Har-
bor. Improving harbor at Scituate, Massachusetts: Contin-
uing improvement, ten thousand dollars.
- Wareham Har-
bor. Improving harbor at Wareham, Massachusetts: Contin-
uing improvement, five thousand dollars.
- Little Narra-
gansett Bay. Improving Little Narragansett Bay, Rhode Island: Con-
tinuing improvement, six thousand dollars.
- Newport Har-
bor. Improving harbor at Newport, Rhode Island: Contin-
uing improvement, twenty thousand dollars.
- Block Island
Harbor and
breakwater. Improving harbor and breakwater at Block Island, Rhode
Island: Continuing improvement, nineteen thousand dol-
lars.
- Bridgeport
Harbor. Improving harbor at Bridgeport, Connecticut: Contin-
uing improvement, ten thousand dollars.

- Breakwater at New Haven, Connecticut: Continuing operations, sixty thousand dollars. Breakwater at New Haven.
- Improving harbor at Milford, Connecticut: Continuing improvement, five thousand dollars. Milford Harbor.
- Improving harbor at New Haven, Connecticut: Continuing improvement, thirty thousand dollars. New Haven Harbor.
- Improving harbor at New London, Connecticut: Continuing improvement, nine thousand dollars. New London Harbor.
- Improving harbor at Norwalk, Connecticut: Continuing improvement, five thousand dollars. Norwalk Harbor.
- Improving harbor at Southport, Connecticut: Continuing improvement, three thousand dollars. Southport Harbor.
- Improving harbor at Stonington, Connecticut: Continuing improvement, twenty-five thousand dollars. Stonington Harbor.
- Improving Buttermilk Channel, New York Harbor: Continuing improvement, sixty thousand dollars. Buttermilk channel, New York Harbor.
- Improving harbor at Buffalo, New York: Continuing improvement, one hundred and twenty-five thousand dollars. Buffalo Harbor.
- Improving Canarsie Bay, New York: Continuing improvement, three thousand dollars. Canarsie Bay.
- Improving harbor at Charlotte, New York: Continuing improvement, thirty-five thousand dollars. Charlotte Harbor.
- Improving Flushing Bay, New York: Continuing improvement, five thousand dollars. Flushing Bay.
- Improving harbor at Great Sodus Bay, New York: Continuing improvement, twenty-five thousand dollars. Great Sodus Bay Harbor.
- Improving harbor at Little Sodus Bay, New York: Continuing improvement, twenty-five thousand dollars. Little Sodus Bay Harbor.
- Improving harbor at New Rochelle, New York: Continuing improvement, fifteen thousand dollars. New Rochelle Harbor.
- Improving Echo Harbor, New Rochelle, New York: Continuing improvement, three thousand dollars. Echo Harbor.
- Improving harbor at Ogdensburgh, New York, ten thousand dollars. Ogdensburgh Harbor.
- Improving harbor at Oswego, New York: Continuing improvement and enlargement of harbor, eighty thousand dollars. Oswego Harbor.
- Improving Oak Orchard Harbor, New York, three thousand dollars. Oak Orchard Harbor.
- Improving harbor at Port Chester, New York: Continuing improvement, fifteen thousand dollars. Port Chester Harbor.
- Improving Gowanus Bay: Continuing improvement, twenty thousand dollars. Gowanus Bay.
- Improving harbor at Port Jefferson, New York: Completing improvement, eight thousand dollars. Port Jefferson Harbor.
- Improving harbor at Pultneyville, New York: Continuing improvement, four thousand dollars. Pultneyville Harbor.
- Improving Sumpawanus Inlet, Long Island, New York, two thousand dollars. Sumpawanus Inlet.
- Improving harbor at Rondout, New York: Repair of existing works, two thousand dollars. Rondout Harbor.
- Improving Sheepshead Bay, New York: Continuing improvement, three thousand dollars. Sheepshead Bay.

- Wilson Harbor. Improving harbor at Wilson, New York: Continuing improvement, ten thousand dollars.
- Erie Harbor. Improving harbor at Erie, Pennsylvania: Continuing improvement, twenty thousand dollars.
- Ice harbor, Marcushook. *Proviso.* Ice-harbor at Marcus Hook, Pennsylvania: Continuing operations, fifteen thousand dollars: *Provided*, That this sum shall be expended under the plans of the engineers as approved by the Secretary of War.
- Delaware Breakwater Harbor. *Proviso.* Improving harbor at Delaware Breakwater, Delaware: Beginning the work of closing the "Gap," or opening, between the two works, which admits the northeast gales to the anchorage, one hundred and twenty-five thousand dollars: *Provided*, That the Secretary of War is hereby authorized to use any unexpended balance remaining of the appropriation made under the act of Congress approved January twenty-third, eighteen hundred and eighty, for the purpose of removing certain wrecks from the harbor at the Delaware Breakwater and the entrance thereto, and in the main ship-channel of the Delaware Bay and River for the purpose of removing any wrecks now or hereafter existing in the said Delaware Bay or Delaware River.
- Iceharbor, head of Delaware Bay, etc. Ice-harbor at the head of Delaware Bay, and for removal of sunken piers in channel back of Reedy Island, Delaware: For commencement of work, twenty-five thousand dollars.
- Wilmington Harbor. Improving harbor at Wilmington, Delaware: Deepening the channel and improving Christiana River from the Delaware River to Wilmington, fifty thousand dollars.
- Baltimore Harbor. Improving harbor at Baltimore, Maryland: Continuing operations for shortening and deepening the channel to twenty-seven feet at mean low water, four hundred and fifty thousand dollars.
- Breton Bay Harbor. Improving harbor at Breton Bay, Leonardtown, Maryland: Continuing improvement, five thousand dollars.
- Harbor, entrance to St. Jerome's Creek. Improving harbor at entrance of Saint Jerome's Creek, Maryland: Continuing operations five thousand dollars.
- For surveys of ship canal to connect Chesapeake and Delaware bays, etc. That the sum of ten thousand dollars or so much thereof as may be necessary, be, and the same is hereby, appropriated, to be expended under the direction of the Secretary of War, in completing the surveys of a ship canal to connect the Chesapeake and Delaware Bays; and the Secretary of War is hereby directed to report to Congress which of the various routes surveyed will afford the greatest protection in case of war and the greatest facilities to commerce by cheapening the cost of transportation from the city of Baltimore to the Atlantic Ocean together with the cost of said improvement and its approaches, and the annual cost of maintaining and operating said canal when constructed. *Provided*, That nothing herein shall be construed to commit the Government to proceed with the construction of the said improvement. The Secretary of War is hereby directed, at his discretion, to cause an examination or survey, or both, and estimates of the cost of improvement proper to be made between City Island and New Rochelle Harbor, New York, and including the chan-
- Proviso.*
- Survey, with report of cost of improvement, to be made between City Island and New Rochelle Harbor, etc.

nel around Glen Island, the expense of such survey to be paid out of the amount appropriated in this act for examinations and surveys.

Improving harbor at Norfolk, Virginia: Continuing improvement of the harbor and its approaches, seventy-five thousand dollars. Norfolk Harbor.

Improving harbor at Charleston (including Sullivan's Island), South Carolina: Continuing improvement, three hundred thousand dollars. Charleston Harbor, etc.

Improving harbor at Brunswick, Georgia: Continuing improvement, twenty-five thousand dollars. Brunswick Harbor.

Improving Cumberland Sound, Georgia and Florida: Continuing improvement, fifty thousand dollars. Cumberland Sound.

Improving harbor of Savannah, Georgia: Continuing improvement of the harbor and river, two hundred thousand dollars. Savannah Harbor.

Improving Apalachicola Bay, Florida: Continuing improvement, twenty-five thousand dollars. Apalachicola Bay.

Improving harbor at Pensacola, Florida: Continuing improvement, fifty thousand dollars. Pensacola Harbor.

Improving Tampa Bay, Florida: Continuing improvement, twenty thousand dollars. Tampa Bay.

Improving harbor and river of Mobile, Alabama: Continuing improvement, one hundred and twenty-five thousand dollars. Mobile Harbor and River.

Improving Aransas Pass and Bay, Texas: Continuing improvement up to Rockport and Corpus Christi, one hundred thousand dollars. Aransas Pass and Bay.

Improving harbor at Brazos Santiago, Texas: Continuing improvement of the bar and harbor, sixty thousand dollars. Brazos Santiago Harbor.

Improving harbor at Galveston, Texas: Continuing operations at outer bar, three hundred thousand dollars. Galveston Harbor.

Improving Passo Cavallo, Texas: Improving Passo Cavallo Inlet into Matagorda Bay, sixty thousand dollars. Pass Cavallo Inlet.

Improving Sabine Pass, Texas: Continuing improvement at Sabine Pass and Blue Buck Bar, one hundred and fifty thousand dollars. Sabine Pass.

Improving harbor at Ashtabula, Ohio: Continuing operations to secure a sixteen-foot channel, twenty thousand dollars. Ashtabula Harbor.

Improving harbor at Black River, Ohio: Continuing improvement, seven thousand dollars. Black River (Lorain).

Improving harbor at Cleveland, Ohio: Continuing improvement, one hundred and seventy-five thousand dollars. Cleveland Harbor.

Harbor of refuge near Cincinnati, Ohio: Continuing operations, sixteen thousand dollars. Harbor of refuge near Cincinnati.

Improving harbor at Fairport, Ohio: Continuing operations, ten thousand dollars. Fairport Harbor.

Improving harbor at Huron, Ohio: Continuing operations two thousand five hundred dollars. Huron Harbor.

Ice harbor at mouth of Muskingum River, Ohio: Continuing operations, forty thousand dollars. Ice harbor, Muskingum River.

- Port Clinton Harbor. Improving harbor at Port Clinton, Ohio: Continuing improvement, six thousand dollars.
- Sandusky Harbor. Improving harbor at Sandusky City, Ohio: Continuing improvement ten thousand dollars.
- Toledo Harbor. Improving harbor at Toledo, Ohio, Continuing improvement, fifty thousand dollars.
- Vermilion Harbor. Improving harbor at Vermillion, Ohio: Continuing improvement, three thousand dollars.
- Michigan City Harbor. Improving harbor at Michigan City, Indiana: Continuing operations at inner harbor, twenty thousand dollars; continuing operations at outside harbor, sixty thousand dollars.
- Calumet Harbor. Improving harbor at Calumet, Illinois: Continuing improvement, thirty-five thousand dollars: *Provided*, That with a view to the improvement of the Calumet River, in the State of Illinois, from its mouth to the Fork at Calumet Lake, the Secretary of War shall appoint a board of engineers who shall examine said river and report upon the practicability and the best method of perfecting and maintaining a channel for through navigation to said Fork at Lake Calumet, adapted to the passage of the largest vessels navigating the Northern and Northwestern Lakes, limiting [*sic*] and locating the lines of channel to be improved by the United States, and of docks that may be constructed by private individuals, corporations, or other parties, and clearly defining the same under the direction of the Chief of Engineers, United States Army; and the Secretary of War shall report to Congress the result of said examination, and the estimated cost of the proposed improvement; also what legislation, if any, is necessary, to prevent encroachments being made or maintained within the limits of the channel designated as above provided for.
- Chicago Harbor. Improving harbor at Chicago, Illinois: Continuing operations at outside harbor, dredging in outer harbor, and constructing exterior breakwater, two hundred thousand dollars.
- Waukegan Harbor. Improving harbor at Waukegan, Illinois: Continuing improvement, twenty thousand dollars.
- Quincy Bay. Improving Quincy Bay, Illinois: Continuing improvement, fifteen thousand dollars.
- Au Sable Harbor. Improving harbor at Au Sable, Michigan: Continuing improvement, five thousand dollars.
- Ice harbor of refuge, Belle River. Improving ice-harbor of refuge at Bell River, Michigan: Continuing operations for removing bars, five thousand dollars.
- Black Lake (Holland). Improving harbor at Black Lake, Michigan: Continuing operations, ten thousand dollars.
- Charlevoix Harbor. Improving harbor at Charlevoix and entrance to Pine Lake, Michigan: Continuing improvement, ten thousand dollars.
- Cheboygan Harbor. Improving harbor at Cheboygan, Michigan: Continuing improvement, ten thousand dollars.
- Frankfort Harbor. Improving harbor at Frankfort, Michigan: Continuing improvement, fifteen thousand dollars.

- Improving harbor at Grand Haven, Michigan: Continuing improvement, forty thousand dollars. Grand Haven Harbor.
- Harbor of refuge at Grand Marais, Michigan: Continuing operations, forty thousand dollars. Grand Marais harbor of refuge.
- Harbor of refuge at Lake Huron, Michigan: Continuing operations, seventy-five thousand dollars, of which twenty-five thousand dollars, or so much thereof as may be necessary may be used in dredging the bar in the middle of the harbor. Sand beach (Harbor Beach).
- Improving harbor at Ludington, Michigan: Continuing improvement, twelve thousand dollars. Ludington Harbor.
- Improving harbor at Manistee, Michigan: Continuing improvement, fifteen thousand dollars. Manistee Harbor.
- Improving harbor at Monroe, Michigan: Continuing improvement, one thousand dollars. Monroe Harbor.
- Improving harbor at Muskegon, Michigan: Continuing improvement, twenty-five thousand dollars. Muskegon Harbor.
- Improving harbor at Marquette, Michigan: Repair of existing works, sixteen thousand dollars. Marquette Harbor.
- Improving harbor at Ontonagon, Michigan: Continuing improvement, twenty thousand dollars. Ontonagon Harbor.
- Improving harbor at Pent Water, Michigan: Continuing improvement, ten thousand dollars. Pentwater Harbor.
- Improving mouth and harbor of Cedar River, Michigan: Continuing improvement, fifteen thousand dollars. Cedar River Harbor.
- Harbor of refuge at Portage Lake, Michigan: Continuing improvement, twenty-five thousand dollars. Portage Lake harbor of refuge.
- Improving harbor at Saint Joseph, Michigan: Continuing improvement of river and harbor at Saint Joseph, and of channel leading up to and including Benton Harbor, twelve thousand dollars. St. Joseph Harbor. Benton Harbor.
- Improving harbor at Saugatuck, Michigan: Continuing improvement, eight thousand dollars. Saugatuck Harbor.
- Improving harbor at South Haven, Michigan: Continuing improvement, seven thousand dollars. And three thousand dollars for removing obstructions in and dredging channel of river to railroad bridge. South Haven Harbor.
- Improving harbor at Thunder Bay, Michigan: Continuing improvement by dredging channel one hundred and fifty feet wide to depth of fourteen feet, fifteen thousand dollars. Thunder Bay (Alpena) Harbor.
- Improving harbor at White River, Michigan: Continuing improvement, twelve thousand dollars. White River (Lake).
- Improving harbor at Ahnapee, Wisconsin: Continuing improvement, twelve thousand dollars. Ahnapee Harbor.
- Improving harbor at Green Bay, Wisconsin: Continuing improvement, twenty thousand dollars. Green Bay Harbor.
- Improving harbor at Kenosha, Wisconsin: Continuing improvement six thousand dollars. Kenosha Harbor.
- Improving harbor at Kewaunee, Wisconsin: Continuing improvement, twelve thousand dollars. Kewaunee Harbor.
- Improving harbor at Manitowoc, Wisconsin: Continuing improvement, ten thousand dollars. Manitowoc Harbor.

Menominee Harbor.	Improving harbor at Menominee, Wisconsin: Continuing improvement, fifteen thousand dollars.
Milwaukee Harbor.	Improving harbor at Milwaukee, Wisconsin: Continuing improvement; ten thousand dollars.
Milwaukee Bay harbor of refuge.	Harbor of refuge at Milwaukee Bay, Wisconsin: Continuing improvement, one hundred thousand dollars.
Oconto Harbor.	Improving harbor at Oconto, Wisconsin: Continuing improvement, fifteen thousand dollars.
Port Washington Harbor.	Improving harbor at Port Washington, Wisconsin: Continuing improvement, seventeen thousand dollars.
Racine Harbor.	Improving harbor at Racine, Wisconsin: Continuing improvement, seven thousand dollars.
Superior Bay.	Dredging Superior Bay, Wisconsin: Continuing operations forty thousand dollars.
Sheboygan Harbor.	Improving harbor at Sheboygan, Wisconsin: Continuing improvement, thirty thousand dollars.
Sturgeon Bay harbor of refuge.	Improving harbor of refuge at entrance of Sturgeon Bay, Canal, Wisconsin: Continuing improvement, twenty thousand dollars.
Two Rivers Harbor.	Improving harbor at Two Rivers, Wisconsin: Continuing improvement, fifteen thousand dollars.
Muscatine Harbor.	Improving harbor at Muscatine, Iowa; Continuing improvement, two thousand five hundred dollars.
Duluth Harbor.	Improving harbor at Duluth, Minnesota: Continuing improvement, forty-five thousand dollars.
Grand Marais Harbor.	Improving harbor at Grand Marais, Minnesota: Continuing improvement, twenty thousand dollars.
Humboldt Harbor and Bay.	Improving Humboldt Harbor and Bay, California: Continuing improvement, forty thousand dollars.
Oakland Harbor.	Improving harbor at Oakland, California: Continuing improvement two hundred thousand dollars.
Wilmington Harbor, Cal.	Improving harbor at Wilmington, California: Continuing improvement, one hundred thousand dollars, of which a sum not exceeding ten thousand dollars, shall be applied for the survey of the harbor at Santa Monica.
Coos Bay and Harbor.	Improving entrance to Coos Bay and Harbor, Oregon: Continuing improvement, thirty thousand dollars.
Yaquina Bay.	Improving entrance to Yaquina Bay, Oregon: Continuing improvement, sixty thousand dollars.
Cathance River.	Improving Cathance River, Maine: Continuing improvement, five thousand dollars.
Lubec Channel.	Improving Lubec Channel, Maine: Continuing improvement, twenty thousand dollars.
Moosabec bar.	Improving Moosabec Bar at Jonesport, Maine: Continuing improvement, ten thousand dollars.
Lamprey River.	Improving Lamprey River, New Hampshire: Continuing improvement, ten thousand dollars.
Otter Creek.	Improving Otter Creek, Vermont: Continuing improvement, two thousand dollars
Merrimac River.	Improving Merrimac River, Massachusetts: Continuing improvement, nine thousand dollars.
Taunton River.	Improving Taunton River, Massachusetts: Continuing improvement, twenty-five thousand dollars.

- For construction of a harbor of refuge at Woods Holl, Construction of harbor of refuge at Woods Hole. Massachusetts, fifty-two thousand dollars.
- Improving Providence River and Narragansett Bay, Providence River and Narragansett Bay. Rhode Island: Continuing improvement, one hundred and twenty-five thousand dollars.
- Improving Connecticut River, Connecticut: Continuing improvement below Hartford, forty five thousand dollars, five thousand dollars of which for the improvement of the channel of Salmon River. Connecticut River and channel of Salmon River.
- Improving Housatonic River, Connecticut: Continuing improvement, two thousand dollars. Housatonic River.
- Improving Thames River, Connecticut: Continuing improvement, thirty-five thousand dollars. Thames River.
- Improving channel between Staten Island and New Jersey at Elizabethport: Continuing improvement, forty thousand dollars. Channel between Staten Island and New Jersey at Elizabethport.
- Removing obstructions in East River and Hell Gate, New York: Continuing operations, two hundred thousand dollars. Removing obstructions, East River and Hell Gate.
- Improving Hudson River, New York: Continuing improvement, ten thousand dollars. Hudson River.
- Improving Niagara River, New York: Continuing improvement, one thousand five hundred dollars. Niagara River.
- Improving Newtown Creek, New York: Continuing improvement, fifteen thousand dollars. New town Creek.
- Improving Ticonderoga River, New York: Continuing improvement, five thousand dollars. Ticonderoga River.
- Improvement Cheesequake's Creek, New Jersey: Continuing improvement, fifteen thousand dollars. Cheesequake Creek.
- Improving Elizabeth River, New Jersey: Continuing improvement, eight thousand dollars. Elizabeth River.
- Improving Mattawan Creek, New Jersey: Continuing improvement, six thousand dollars. Matawan Creek.
- Improving Manasquan River, New Jersey: Continuing improvement, seven thousand dollars. Manasquan River.
- Improving Passaic River, New Jersey: Improvement above Newark, seven thousand dollars; from Pennsylvania Railroad Bridge to mouth of river, forty-three thousand dollars. Passaic River.
- Improving Rahway River, New Jersey: Continuing improvement, seven thousand dollars. Rahway River.
- Improving Rancocas River, New Jersey: Continuing improvement, ten thousand dollars. Rancocas River.
- Improving Raritan River, New Jersey: Continuing improvement, twenty-five thousand dollars, of which sum ten thousand dollars shall be expended on the south channel between Crab Island and Karney's Dock. Raritan River.
- Improving Raritan Bay, New Jersey, from Perth Amboy and South Amboy to the main ship-channel off Great Kill, fifty thousand dollars. Raritan Bay.
- Improving Cohansey Creek, New Jersey, five thousand dollars. Cohansey Creek.
- Improving Salem River, New Jersey: Continuing improvement, one thousand five hundred dollars. Salem River.

- Shrewsbury River and South Shrewsbury River. Improving Shrewsbury River, New Jersey: Continuing improvement, thirty thousand dollars, of which sum fifteen thousand dollars for the South Shrewsbury River and fifteen thousand for the north and main branch of the Shrewsbury River.
- South River. Improving South River, New Jersey: Continuing improvement, ten thousand dollars.
- Woodbridge Creek. Improving Woodbridge Creek, New Jersey: Continuing improvement, five thousand dollars.
- Allegheny River. Improving Allegheny River, Pennsylvania: Continuing improvement, fifteen thousand dollars.
- Chester Creek. Improving Chester Creek, Pennsylvania: Continuing improvement, three thousand dollars.
- Schuylkill River. Improving Schuylkill River, Pennsylvania: Continuing improvement, twenty-five thousand dollars.
- Delaware River. Improving Delaware River between Trenton, New Jersey, and Bridesburgh, Pennsylvania: Continuing improvement ten thousand dollars.
- Improving Delaware River below Bridesburgh, Pennsylvania; Continuing improvement, one hundred and thirty-six thousand dollars, of which sum eleven thousand dollars for improvement of Smith's Island Bar.
- Improving Delaware River at Schooner Ledge, Pennsylvania and Delaware: Continuing improvement, forty thousand dollars.
- Improving Delaware River near Cherry Island Flats, Pennsylvania and Delaware: Continuing improvement, one hundred thousand dollars.
- Broad Creek River. Improving Broad Creek [Broad Creek River], Delaware: Continuing improvement from its mouth to Laurel, five thousand dollars.
- Indian River. Improving Indian River, in the State of Delaware, ten thousand dollars.
- Broadkill River. Improving Broadkill River, Delaware: Continuing improvement, five thousand dollars.
- Smyrna River. Improving Duck Creek [Smyrna River], Delaware: Continuing improvement at its mouth, two thousand dollars.
- Mispillion Creek. Improving Mispillion Creek, Delaware: Continuing improvement, three thousand dollars.
- Pier, Delaware Bay, near Lewes. Constructing pier in Delaware Bay near Lewes, Delaware: Continuing construction, thirteen thousand dollars.
- Chester River. Improving Chester River, Maryland: Continuing improvement from Spry's Landing to Crumpton, six thousand five hundred dollars.
- Choptank River. Improving Choptank River, Maryland: Continuing improvement between Denton and Greensborough, five thousand dollars.
- Water passage between Deal Island and mainland (Upper Thoroughfare). Improving upper water-passage or thoroughfare between Deal's Island and the mainland on Darnes Quarter, Maryland, five thousand dollars; and the unexpended balance of lower thoroughfare is appropriated to the upper passage or thoroughfare.
- Potomac River and flats, near Washington. Improving the Potomac River in the vicinity of Washington with reference to the improvement of navigation,

the establishment of harbor lines, and the raising of the flats, under the direction of the Secretary of War, and in accordance with the plan and report made in compliance with the river and harbor act approved March third eighteen hundred and eighty-one, and the reports of the board of engineers made in compliance with the resolution of the Senate of December thirteenth, eighteen hundred and eighty-one, four hundred thousand dollars.

And it is hereby made the duty of the Attorney-General to examine all claims of the title to the premises to be improved under this appropriation, and see that the rights of the government in all respects are secured and protected; and if he deems it necessary he is authorized to cause a suit or suits in law or in equity to be instituted, in the name of the United States, in the supreme court of the District of Columbia, against any and all claimants of title under any patent which in his opinion was by mistake or was improperly or illegally issued for any part of the marshes or flats within the limits of the proposed improvement.

Attorney-General to examine all claims to title to premises to be improved, etc.

Improving Archer's Hope River, Virginia: Continuing improvement, five thousand dollars. Archer's Hope River.

Improving Black Water River, Virginia: For completion of improvement, one thousand five hundred dollars. Black water River.

Improving Chickahominy River, Virginia: Continuing improvement, five thousand dollars. Chickahominy River.

Improving James River, Virginia: Continuing improvement, seventy-five thousand dollars. James River.

Improving New River, Virginia and West Virginia: Continuing improvement from mouth of Wilson, in Grayson County, to mouth of Greenbrier River, twelve thousand dollars, of which sum five thousand dollars shall be expended between the lead mines in Wythe County and the mouth of Wilson, in Grayson County. New River.

Improving Nomini Creek, Virginia: Continuing improvement, two thousand dollars. Nomini Creek.

Improving Pamunkey River, Virginia: Continuing improvement, two thousand five hundred dollars. Pamunkey River.

Improving Rappahannock River, Virginia: Continuing improvement, seventeen thousand dollars. Rappahannock River.

Improving Staunton River, Virginia: Continuing improvement, seven thousand dollars, of which five thousand dollars to be expended between Roanoke Station and Brook Neal, and two thousand dollars to be expended between Brook Neal, in Campbell County, and the mouth of Pig River, in Franklin County, Virginia. Staunton River.

Improving Totuskey River, Virginia: Continuing improvement, five thousand dollars. Totuskey River.

Improving Urbana Creek, Virginia: Continuing improvement, four thousand dollars. Urbana Creek.

Improving York River, Virginia: Continuing improvement, twenty-five thousand dollars. York River.

- Dan River. Improving Dan River, Virginia and North Carolina: Continuing improvement, seven thousand five hundred dollars.
- North Landing River. Improving North Landing River, Virginia and North Carolina: Continuing improvement, eight thousand dollars.
- Elk River. Improving Elk River, West Virginia: Continuing improvement two thousand dollars.
- Kanawha River. Improving Great Kanawha River, West Virginia: Continuing improvement and operation of works, two hundred thousand dollars.
- Little Kanawha River. Continuing the improvement of the Little Kanawha River, in West Virginia: To complete lock and dam, as estimated for by engineers, thirty-one thousand dollars: *Provided*, That no part of this amount shall be expended until the Little Kanawha Improvement Company shall have filed with the Secretary of War, to be approved by him, its agreement not to charge, in any manner, any tolls on the Little Kanawha river.
- Proviso.
- Guyandot River. Improving Guyandotte River, West Virginia: Continuing improvement, two thousand dollars.
- Cape Fear River. Improving Cape Fear River from the Ocean to Wilmington, North Carolina; Continuing improvement, two hundred and twenty-five thousand dollars.
- Improving Cape Fear River from Wilmington to Fayetteville, North Carolina, thirty thousand dollars.
- Contentnia Creek. Improving Contentnia Creek, North Carolina: Continuing improvement, ten thousand dollars.
- Yadkin River. Improving Yadkin River, North Carolina, twenty-five thousand dollars.
- Currituck Sound and North River bar, and Coanjoek Bay. Improving Currituck Sound and North River Bar, North Carolina: Continuing improvement, including Coanjoek Bay, twenty thousand dollars.
- Beaufort Harbor. Improving Beaufort Harbor, North Carolina: Continuing improvement, thirty thousand dollars, five thousand dollars of which shall be applied to the improvement of the line of inland navigation from Beaufort Harbor to New Berne.
- French Broad River. Improving French Broad River, North Carolina: Continuing improvement from Smith's bridge up, five thousand dollars.
- New River. Improving New River, North Carolina, five thousand dollars.
- Lillington River. Improving Lillington River, North Carolina: Continuing improvement, three thousand dollars.
- Meherrin River. Improving Meherin River, North Carolina, five thousand dollars.
- Neuse River. Improving Neuse River, North Carolina: Continuing improvement, thirty-five thousand dollars, five thousand dollars of which shall be applied to the improvement of the line of inland navigation from New Berne to Beaufort Harbor.
- Roanoke River. Improving Roanoke River, North Carolina, five thousand dollars.

Improving Pamlico and Tar Rivers, North Carolina: Pamlico and Tar rivers.
Continuing improvement, ten thousand dollars.

Improving Trent River, North Carolina: Continuing improvement, ten thousand dollars. Trent River.

Improving Waccemaw River, North Carolina and South Carolina: Continuing improvement four thousand four hundred dollars. Waccemaw River.

Improving Great Pedee River, South Carolina: Continuing improvement, six thousand dollars. Great Pedee River.

Improving Santee River, South Carolina: Continuing improvement, twenty thousand dollars. Santee River.

Improving Wappoo Cut, South Carolina: Continuing improvement ten thousand dollars. Wappoo Cut.

Improving Wateree River, South Carolina: Continuing improvement, fifteen thousand dollars. Wateree River.

Improving Altamaha River, Georgia: Continuing improvement, fifteen thousand dollars. Altamaha River.

Improving Chattahoochee River, Georgia: Continuing improvement, twenty-five thousand dollars. Chattahoochee River.

Improving Coosa River, Georgia and Alabama: Continuing improvement, seventy-five thousand dollars; and the sum of eight thousand seven hundred dollars heretofore appropriated for the Etowa River is hereby transferred to the Coosa River below Rome, Georgia. Coosa River.

Improving Flint River, Georgia: Continuing improvement, twenty-five thousand dollars, of which sum fifteen thousand dollars shall be expended below Albany and ten thousand dollars from Albany to Montezuma. Flint River.

Improving Ockmulgee River, Georgia: Continuing improvement, five thousand dollars. Ockmulgee River.

Improving Oconee River, Georgia: Continuing improvement five thousand dollars, of which sum three thousand dollars shall be expended on Car Shoals. Oconee River.

Improving Oostenaula and Coosawattee Rivers, Georgia: Continuing improvement, one thousand dollars. Oostenaula and Coosawattee rivers.

Improving Savannah River, Georgia: Continuing improvement between cities of Augusta and Savannah, twenty-five thousand dollars. Savannah River.

Improving the Savannah River about the city of Augusta: To continue improvement, fifteen thousand dollars.

Improving Apalachicola River, Florida: Continuing improvement, two thousand dollars. Apalachicola River.

Improving Peas [Peace] Creek, Florida: Continuing improvement, four thousand dollars. Peace Creek.

Improving Saint John's River, Florida: Continuing improvement, one hundred and fifty thousand dollars, and twenty thousand dollars of this amount may be used on the river above the mouth, if the Chief of Engineers shall consider it best for the interests of commerce. St. Johns River.

Improving Suwanee River, Florida: Continuing improvement five thousand dollars. Suwanee River.

Improving Volusia Bar, Florida: Continuing improvement, five thousand dollars. Volusia bar.

Choctaw-hatchee River.	Improving Choctawhatchee River, Florida and Alabama: Continuing improvement up to Newton, Alabama, twenty thousand dollars. That twelve thousand dollars of this amount shall be expended for the improvement of the river above Geneva to Newton, Alabama, and two thousand dollars of the balance for the improvement of La Grange Bayou from its mouth up to the town of Freeport, Florida.
Lagrange Bayou.	
Escambia and Conecuh rivers.	Improving Escambia and Conecuh Rivers, Florida and Alabama: Continuing improvement, twelve thousand dollars.
Alabama River.	Improving Alabama River, Alabama: Continuing improvement, twenty thousand dollars.
Warrior and Tombigbee rivers.	Improving Warrior and Tombigbee Rivers, Alabama and Mississippi: Continuing improvement, thirty thousand dollars, of which sum ten thousand dollars to be applied to the Warrior below Tuscaloosa, seven thousand five hundred dollars to the Tombigbee between Columbus and Vienna, seven thousand five hundred dollars to the Tombigbee between Vienna and Demopolis, and five thousand dollars below Demopolis.
Big Sunflower River.	Improving Big Sunflower River, Mississippi: Continuing improvement, five thousand dollars.
Noxubee River.	Improving Noxubee River, Mississippi: Continuing improvement, ten thousand dollars.
Pascagoula River.	Improving Pascagoula River, Mississippi: Continuing improvement, eight thousand dollars.
Pearl River.	Improving Pearl River, Mississippi: Continuing improvement from Jackson to Carthage, two thousand five hundred dollars.
Roadstead into Back Bay of Biloxi.	For improving the roadstead which leads into the Back Bay of Biloxi, on the Mississippi Sound, according to survey and estimate made, five thousand dollars.
Pearl River.	Improving Pearl River below Jackson, Mississippi: Continuing improvement, fifteen thousand dollars.
Tallahatchie River.	Improving Tallahatchee River above mouth of the Coldwater, Mississippi: Continuing improvement, three thousand dollars.
Tchula Lake.	Improving Tchula Lake, Mississippi: Continuing improvement, two thousand five hundred dollars.
Tombigbee River.	Improving Tombigbee River, Mississippi: Continuing improvement above Columbus, one thousand dollars.
Yalobusha River.	Improving Yallabusha River, Mississippi: Continuing improvement, three thousand five hundred dollars.
Yazoo River.	Improving Yazoo River, Mississippi: Continuing improvement, eight thousand dollars.
Bayou Bartholomew.	Improving Bayou Bartholomew, Louisiana and Arkansas: Continuing improvement, five thousand dollars.
Bayou Black.	Improving Bayou Black ^a up to Houma, Louisiana: Continuing improvement, ten thousand dollars

^a Discharges into Bayou Boeuf, which latter empties into Berwick Bay (an enlargement of Atchafalaya River) at Morgan City.

Improving Bœuf River, Louisiana: Continuing improvement, five thousand dollars.	Bœuf River.
Improving Bayou Terre Bonne up to Houma, Louisiana: Continuing improvement, seven thousand dollars.	Bayou Terrebonne.
Improving Calcasieu Pass, Louisiana: Continuing improvement, three thousand dollars.	Calcasieu Pass.
Improving Calcasieu River, Louisiana: Continuing improvement, seven thousand dollars.	Calcasieu River.
Improving Red River, Louisiana: Continuing improvement from the Atchafalaya to Fulton, Arkansas, including Bayou Pierre, Tone's Bayou, and to relieve the town of Alexandria from the encroachments of the river, seventy-five thousand dollars.	Red River.
Improving Tchefuncte River and Bogue Falia, Louisiana: Continuing improvement, one thousand five hundred dollars.	Tchefuncte River and Bogue Falia.
Improving Tickfaw River, Louisiana: Continuing improvement, two thousand dollars.	Tickfaw River.
Improving mouth of Brazos River, Texas: Continuing improvement, fifty thousand dollars.	Mouth of Brazos River.
Improving Buffalo Bayou, Texas: Continuing improvement, fifty thousand dollars.	Buffalo Bayou.
Protection of river bank at Fort Brown, Texas, one thousand dollars.	Protection of river bank, Fort Brown, Tex.
Improving ship-channel in Galveston Bay, Texas: To complete improvement, ninety-four thousand five hundred dollars.	Ship channel, Galveston Bay.
Improving Neches River, Texas: Continuing improvement, five thousand dollars.	Neches River.
Improving Sabine River, Texas: Continuing improvement of Narrows above Orange, and deepening channel at mouth of river, four thousand dollars.	Sabine River.
Improving Trinity River, Texas: Continuing improvement, eight thousand dollars.	Trinity River.
Improving Arkansas River, Arkansas: Continuing improvement at Pine Bluff, twenty thousand dollars.	Arkansas River.
Improving Arkansas River, Arkansas and Kansas: Continuing improvement between Fort Smith and Wichita [Wichita], twenty thousand dollars.	
Improving Black River, Arkansas and Missouri: Continuing improvement, ten thousand dollars.	Black River.
Improving Fourche Le Fevre River, Arkansas: Continuing improvement, four thousand dollars.	Fourche Le Fevre River.
Improving Ouachita River, Arkansas and Louisiana: Continuing improvement, twelve thousand dollars.	Ouachita River.
Improving Saline River [^a], Arkansas: Continuing improvement, four thousand dollars.	Saline River.
Improving White River between Jacksonport and Buffalo Shoals, Arkansas: Continuing improvement, six thousand dollars.	White River.
Improving White and Saint Francis Rivers, Arkansas: Continuing improvement, twelve thousand dollars.	White and St. Francis rivers.

^a A tributary of Ouachita River.

- Hatchee River.** Improving Big Hatchee River, Tennessee: Continuing improvement, three thousand dollars.
- Caney Fork River.** Improving Caney Fork River, Tennessee; Continuing improvement, four thousand dollars.
- Obey River.** For continuing to completion the work on Obey's River, in Tennessee, a tributary of the Cumberland, five thousand dollars.
- Clinch River.** Improving Clinch River, Tennessee: Continuing improvement, three thousand dollars.
- Cumberland River.** Improving Cumberland River above Nashville, Tennessee: Continuing improvement above Nashville, Tennessee, thirty thousand dollars.
- For continuing the improvement of the Cumberland River at Smith's Shoals, Kentucky, fifteen thousand dollars.
- Improving Cumberland River below Nashville, Tennessee; Continuing improvement, fifteen thousand dollars.
- Vol. 26, p. 445.** Improving Cumberland River above mouth of the Jellico, Kentucky: Continuing improvement, five thousand dollars.
- Post, p. 571.**
- South Fork of Cumberland River.** Improving South Fork of the Cumberland River, Kentucky, three thousand dollars.
- Duck River.** Improving Duck River, Tennessee: Continuing improvement, three thousand dollars.
- French Broad River.** Improving French Broad River, Tennessee: Continuing improvement, five thousand dollars.
- Hiwassee River.** Improving Hiwassee River, Tennessee: Continuing improvement, one thousand five hundred dollars.
- Tennessee River.** Improving Tennessee River above Chattanooga, Tennessee: Continuing improvement, seven thousand dollars.
- Improving Tennessee River below Chattanooga, Tennessee and Alabama: Continuing improvements below Chattanooga, including Muscle Shoals and Shoal at Reynoldsburgh, two hundred and fifty thousand dollars.
- Big Sandy River.** Improving Big Sandy River, Kentucky, twenty-five thousand dollars, of which sum five thousand dollars for the improvement of Louisa Fork and five thousand dollars for the improvement of Tug Fork.
- Kentucky River.** Improving Kentucky River, Kentucky: Continuing improvement from mouth of river to Three Forks, two hundred and twenty-five thousand dollars of which sum seventy-five thousand dollars shall be used for the erection of a lock and movable dam at Beatysville, at junction of Three Forks.
- Tradewater River.** Improving Treadwater [Tradewater] River, Kentucky: Continuing improvement, three thousand five hundred dollars.
- Ohio River.** Improving Ohio River: Continuing improvement, three hundred and fifty thousand dollars.
- Sandusky River.** Improving Sandusky River, Ohio: Continuing improvement, four thousand dollars.
- Clinton River.** Improving Clinton River, Michigan: Continuing improvement, six thousand dollars.

Improving Detroit River, Michigan: Continuing improvement, sixty thousand dollars. Detroit River.

Improving Grand River, Michigan, Continuing improvement from mouth of river to city of Grand Rapids, fifteen thousand dollars. Grand River.

Improving Saginaw River, Michigan: Continuing improvement, one hundred and twenty-five thousand dollars, of which sum sixty thousand dollars to be used opposite Bay City and for deepening the channel from the river into the bay, and sixty-five thousand dollars for improving the river above Bay City. Saginaw River.

Improving Chippewa River, Wisconsin: Continuing improvement, thirty-five thousand dollars: *Provided*, That nothing shall be done nor shall any improvement be made on the said Chippewa River under or in pursuance of this act, or the appropriation hereby made, which shall directly or indirectly prevent, interfere with, or obstruct the free navigation of the said river, as heretofore, by steamboats or other water-craft, or the free use thereof, as heretofore, for the floating, guiding, or sheering of loose logs or rafts of lumber or logs upon or down the same, or which shall directly or indirectly prevent, obstruct, or interfere with the use of any slough, arm, or branch of said river, as heretofore, for the holding, assorting or rafting of logs therein. Chippewa River.
Proviso.

Improving Fox and Wisconsin Rivers, Wisconsin: Continuing improvement, two hundred thousand dollars: *Provided*, That the Secretary of War shall, without delay, cause the channel of the Lower Fox River between Lake Winnebago and the upper government dam at Appleton to be restored to its natural width and capacity, and shall cause such changes and alterations to be made in the dams at Menasha and Appleton, not inconsistent with security to navigation, as may be necessary to reduce to and maintain the waters of Lake Winnebago and Little Buttes des Morts, respectively, at their natural height; and a sufficient amount of said sum appropriated is made immediately available. And three thousand dollars of this appropriation, or so much thereof as may be necessary, may be expended above Portage City, to prevent the overflow of the Wisconsin River into the Upper Fox River, so as to prevent injury to the government works on Fox River; and this expenditure may be made separately, or, if deemed more economical by the Secretary of War, in adding to any protecting works which may be made by the State of Wisconsin. Fox and Wisconsin rivers.
Proviso.

Improving Saint Croix River below Taylor Falls, Minnesota and Wisconsin: Continuing improvement thirty thousand dollars. St. Croix River.

Improving Wabash River, Indiana and Illinois: Continuing improvement below Vincennes, forty thousand dollars; continuing improvement between Vincennes and Lafayette, thirty thousand dollars. Wabash River.

White River. Improving White River, Indiana: Continuing improvement from Wabash River to Portersville, and to falls on West Fork, twenty thousand dollars.

Illinois River. Improving Illinois River, Illinois: Continuing improvement, one hundred and seventy-five thousand dollars.

Reservoirs at headwaters of Mississippi River. Reservoirs at headwaters of Mississippi River: Continuing operations, three hundred thousand dollars; and this sum shall be expended at such places on said headwaters of the Mississippi River and its tributaries as the Secretary of War shall determine: *Provided*, That the Secretary of War be, and he is hereby authorized and empowered to enter upon, purchase, take, and hold any lands or premises, and any materials of stone, timber, or other kinds, that may be necessary and proper for the construction of said works. And in case the owner of such lands, premises, and materials and the Secretary of War can not agree as to the value of the lands, premises, and materials taken or to be taken for said use, then the value thereof shall be determined by the appraisal of three disinterested commissioners who may be appointed upon application by either party to the judge of the United States district court for the district in which such land, premises, or materials may be situate; and said commissioners, in their assessment of damages, shall appraise such lands, premises, and materials at what would have been the value thereof, if said works had not been constructed; and upon return into said United States district court of such appraisement, and upon the payment into the same of the estimated value of said land, premises, and materials so taken and appraised as aforesaid, said land, premises, and materials shall be deemed to be, and shall become, the property of the United States, which shall thereby acquire full title to the same. And either party feeling aggrieved at said appraisement may, within thirty days after the same has been returned into said court, file an appeal therefrom and demand a trial by jury in said court to estimate and ascertain the damages sustained: *Provided further*, That the money hereby appropriated shall be used solely for the improvement of the navigation of the Mississippi River and its tributaries, and no part thereof shall be expended with the view to the improvement of private property. And the Secretary of the Interior is hereby authorized and directed to ascertain what, if any, injury is occasioned to the rights of any friendly Indians occupying any Indian reservation by the construction of any of the said dams, or the cutting or removing of trees or other materials from any such reservation for the construction or erection of any of said dams, and to determine the amount of damages payable to such Indians therefor; and all such damages to private property and to friendly Indians, when ascertained and determined in the manner herein directed and pro-

Proviso.

Proviso.

vided, shall be paid by the United States: *Provided, however,* That such damages shall not exceed ten per centum of the sums hereby appropriated for the construction of said reservoirs. *Proviso.*

Improving Upper Mississippi River: Operating snag-boat, twenty-five thousand dollars. Upper Mississippi River.

Improving Mississippi River above Falls of Saint Anthony, Minnesota: Continuing improvement, ten thousand dollars. Mississippi River above falls of St. Anthony.

Improving Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Missouri, Illinois, and Wisconsin: Continuing improvement, two hundred and fifty thousand dollars, of which sum fifteen thousand dollars shall be expended in improving the channel and banks of the river on the west side thereof at Saint Paul.

That the sum of thirty thousand dollars, or so much thereof as may be necessary, be, and the same is hereby, appropriated for the construction of a dry dock at the Des Moines Rapids Canal, on the Mississippi River, at such site as may be selected thereon by the Secretary of War; said dry dock to be used for the construction, examination, repairing, and use of boats, dredges, barges, scows, and other vessels of the United States, and the construction, examination, and repair of vessels for private parties, under such regulations and for such compensation as may, from time to time, be fixed and regulated by the Secretary of War; this appropriation to be expended under the direction of the Secretary of War. Construction of dry dock at Des Moines Rapids Canal.

That whenever the government shall not further use the old lock of the Sault Sainte Marie Canal it shall be converted into a dry dock for the repair of government dredges, revenue cutters, and other craft belonging to the government, and for other craft belonging to private persons, on such terms as the Secretary of War shall prescribe; and for the expense of such construction the amount of sixty-five thousand dollars, balance of tolls in the possession of the State of Michigan, and offered to the United States for this purpose, be accepted by the United States. Old lock of St. Marys Falls Canal converted into dry dock, etc.

Improving Des Moines Rapids, Mississippi River, Iowa, and Illinois: Continuing improvement, thirty thousand dollars. Des Moines Rapids.

Examinations and surveys at South Pass, Mississippi River: To ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at South Pass of the Mississippi River, and to enable the Secretary of War to report during the maintenance of the work, ten thousand dollars. South Pass, Mississippi River.

Gauging waters of Lower Mississippi and its tributaries, and the Columbia River, Oregon: Annual expense of gauging the waters of the Mississippi River and its tributaries, continuing observations of the rise and fall of the river and its chief tributaries, as required by joint resolution of February twenty-first, eighteen hundred and Gauging waters of lower Mississippi and Columbia rivers.

seventy-one, five thousand five hundred dollars, of which sum five hundred dollars for annual expense of gauging the waters of the Columbia River from Astoria to the bar.

- Mississippi, Missouri, and Arkansas rivers.** Improving Mississippi, Missouri, and Arkansas Rivers: Continuing removal of snags, wrecks, and other obstructions from the Mississippi River, eighty-five thousand dollars; from the Missouri River, sixty-five thousand dollars; from the Arkansas River, thirty-five thousand dollars.
- Cuivre River.** Improving Cuivre River, Missouri: Continuing improvement from mouth to Chain of Rocks, and removing snags and other obstructions, five thousand dollars.
- Gasconade River.** Improving Gasconade River, Missouri: Continuing improvement, ten thousand dollars.
- Missouri River.** Improving Missouri River from its mouth to Sioux City, Iowa, including such harbors on said river now in the course of improvement as in the judgment of the Chief of Engineers will benefit commerce and navigation, eight hundred and fifty thousand dollars.
- Improving Missouri River from Sioux City to Fort Benton, one hundred thousand dollars.
- Survey of Missouri River from its mouth to Fort Benton, Montana: Continuing the survey forty thousand dollars.
- Yellowstone River.** Improving Yellowstone River, Montana and Dakota: Continuing improvement, twenty thousand dollars.
- Red River of the North.** Improving Red River of the North, Minnesota and Dakota: Continuing improvement, ten thousand dollars.
- Goose Rapids.** Constructing dam at Goose Rapids, Red River of the North, Minnesota and Dakota: Continuing construction of lock and dam, thirty thousand dollars.
- St. Anthony's Falls.** Improving Saint Anthony's Falls, Minnesota: Continuing improvement, twenty-five thousand dollars.
- Petaluma Creek.** Improving Petaluma Creek, California: Completing improvement, fourteen thousand dollars.
- Sacramento River.** Improving Sacramento River, California: For the improvement and protection of the navigable channels of the Sacramento and Feather Rivers, to be expended under the direction of the Secretary of War, two hundred and fifty thousand dollars.
- San Joaquin River.** Improving San Joaquin River and Mormon Slough, California: Continuing improvement, forty thousand dollars.
- Canal around Cascades of Columbia River.** Constructing canal around Cascades of Columbia River, Oregon: Continuing construction two hundred and sixty-five thousand dollars.
- Upper Columbia River.** Improving Upper Columbia River, Oregon: Continuing improvement of Upper Columbia River, including Snake River, six thousand dollars.
- Lower Willamette River.** Improving Lower Willamette and Columbia Rivers, Oregon: Continuing improvement from Portland, Oregon, to the sea, including bar at mouth of Columbia River, one hundred thousand dollars.

Improving Upper Willamette River, Oregon: Continuing improvement of Upper Willamette, including Yamhill River, five thousand dollars. Upper Willamette River.

Improving Lower Clearwater River, Idaho: Continuing improvement five thousand dollars. Lower Clearwater River.

Improving Cowlitz River, Washington Territory: Continuing improvement, one thousand dollars. C o w l i t z River.

Improving Skagit, Stielaquamish, Nooksack, Snohomish, and Snoqualmie Rivers, Washington Territory: To build, equip, and operate snag-boat for one year, twenty thousand dollars. Snag boat—Skagit, Stielaquamish, Nooksack, and Snoqualmie rivers.

Improving mouth of Coquille River, Oregon: Extension of jetty already commenced, ten thousand dollars, of which sum two thousand dollars for removing snags in upper river, at discretion of Secretary of War. C o q u i l l e River.

Examinations, surveys, and contingencies of rivers and harbors: Examinations and surveys, and for contingencies, and for incidental repairs of harbors for which there is no special appropriation, one hundred and fifty thousand dollars, of which sum fifty thousand dollars for surveys and one hundred thousand dollars for contingencies, including incidental repairs of harbors. Examinations and surveys.

For expenses of a board of engineers to examine in detail the mouth of the Columbia River, Oregon, and report such plan, with estimates, for its permanent improvement, as they approve, the said board being required to report before the next session of the present Congress, seven thousand five hundred dollars. Board of Engineers to examine mouth of Columbia River, etc.

Improving Susquehanna River above and below Havre de Grace, Maryland, twenty-five thousand dollars, of which sum seven thousand five hundred dollars shall be expended above the bridge, and five thousand dollars for the completion of the channel to the Fishing Battery Light-House and for strengthening and extending the piers and breakwater for the protection of said channel. Susquehanna River.

Improving Elk River, Maryland: Continuing improvement, six thousand five hundred dollars. Elk River.

Improving Malden River, Massachusetts, ten thousand dollars. M a l d e n River.

Constructing harbors of refuge on Lake Pepin, twenty thousand dollars, of which sum ten thousand dollars at Stockholm, Wisconsin, and ten thousand dollars at Lake City, Minnesota. Harbors of refuge on Lake Pepin.

Improving harbor at New Buffalo, Michigan, five thousand dollars. New Buffalo Harbor.

Improving Appomattox River, Virginia, thirty-five thousand dollars. Appomattox River.

Construction of ice-harbor at Dubuque, Iowa, twenty thousand dollars. Ice harbor at Dubuque.

Improving Chippewa River at Yellow Banks, thirty thousand dollars. C h i p p e w a River.

Improving Cocheco River, New Hampshire; completing improvement, twenty-eight thousand dollars. C o c h e c o River.

Improving Frankford Creek, Pennsylvania, ten thousand dollars. F r a n k f o r d Creek.

Pensaukee Harbor.	Improving Pensaukee Harbor, Wisconsin, ten thousand dollars.
Royal River.	Improving Royal River, Maine, ten thousand dollars.
Mamaroneck Harbor.	Improving Mamaroneck Harbor, New York, fifteen thousand dollars.
Sacketts Harbor.	Improving Sackett's Harbor, New York, seven thousand dollars.
Corsica Creek.	Improving Corsica Creek, Maryland, five thousand dollars.
Romerly Marsh.	Improvement of Romley [Romerly] Marsh, Georgia, by route designated in the survey of engineers as route numbered four, ten thousand dollars.
Grass River.	Improving Grass River at Massena, New York, three thousand dollars.
Edisto River.	Improving Edisto River, South Carolina, eight thousand dollars.
Georgetown Harbor.	Improving Georgetown Harbor, South Carolina, seven thousand dollars.
Cahaba River.	Improving Cahaba River, Alabama, twenty thousand dollars.
Salkahatchie River.	Improving Salkahatchie River, South Carolina, five thousand dollars.
Tallapoosa River.	Improving Tallapoosa River, Alabama, fifteen thousand dollars.
Key West Harbor.	Improving Key West Harbor, Florida, especially the northwest channel, twenty-five thousand dollars.
Manatee River.	Improving Manatee River, Florida, twelve thousand dollars.
Caloosahatchee River.	Improving Caloosahatchee River, Florida, five thousand dollars.
Lynn Harbor.	Improving Lynn Harbor, Massachusetts, sixty thousand dollars.
Little Tennessee River.	Improving Little Tennessee River, Tennessee, five thousand dollars.
White River.	Improving White River above Buffalo Shoals, Arkansas, four thousand dollars.
Chehalis River.	Improving Chehalis River, Washington Territory, three thousand dollars.
Greenport Harbor.	Improving Greenport Harbor, New York, ten thousand dollars.
Hay Lake channel, St. Marys River.	Improving Hay Lake Channel of the Sault Sainte Marie River, via the Middle Neebish, two hundred thousand dollars, of which amount the sum of ten thousand dollars may be expended in improving the East Neebish channel.
Keyport Harbor.	Improving Keyport Harbor, New Jersey, from the Keyport Steamboat Company's Wharf to Raritan Bay Channel, thirty thousand four hundred and seventy-five dollars.
Maurice River.	Improving Maurice River, New Jersey, three thousand dollars.
Mantua Creek.	Improving Mantua Creek, New Jersey, three thousand dollars.
Woodbury Creek.	Improving Woodbury Creek, New Jersey, five thousand dollars.

Improving Racoon River, New Jersey, three thousand dollars. R a c c o o n
River.

Improving North Branch of Susquehanna River, Pennsylvania, fifteen thousand dollars. N o r t h
Branch, Sus-
quehanna River.

Improving Clinton Harbor, Connecticut, three thousand dollars. Clinton Har-
bor.

Improving South Forked Deer River, Tennessee, three thousand dollars. South Forked
Deer River.

Improving Old Town Creek, Mississippi, three thousand dollars. O l d T o w n
Creek.

Improving Monongahela River, West Virginia: Continuing improvement, twenty-five thousand dollars. Monongahela
River.

For continuing the practical test of the flume invented by M. J. Adams, the said test to be made under the supervision and direction of said Adams, eight thousand dollars. A d a m s ' s
flume.

That the Secretary of War be, and he is hereby, authorized and directed to survey and locate a canal [^a] from a point on the Illinois River at or near the town of Hennepin, by the most practicable and convenient route, to the Mississippi River at or above the city of Rock Island, with a branch canal or feeder from the most practicable and convenient point on Rock River to the most practicable and convenient point on the main line of said canal. Said canal and said branch shall not be less than seventy feet wide at the water-line, and not less than seven feet in depth of water, with locks not less than one hundred and fifty feet in length and twenty-one feet in width, and with a capacity for vessels of at least two hundred and eighty tons burden; and for that purpose the Secretary of War shall have power and authority, by engineers and agents employed by him, to enter upon any lands for the purpose of making the necessary preliminary examinations and surveys; and the cost of construction, the annual cost of maintenance, and economy of use of said canal, when completed, shall be estimated and accompany the said surveys; and the Secretary of War shall cause to be made by skillful engineers of the Army a survey of the Illinois and Michigan Canal connecting the Illinois River with Lake Michigan at Chicago, and estimates of the cost of enlarging the same so as to correspond in dimensions with the proposed canal between Hennepin and the Mississippi River, and to report to the next session of Congress the cost of enlarging said canal, and the construction of the canal between Hennepin and the Mississippi River and the right of way therefor; and for the purposes of this paragraph the sum of thirty thousand dollars, or so much thereof as may be necessary, is hereby appropriated. *Provided* that nothing herein shall be construed to commit the government to proceed with the construction of the said improvement.

Survey and
location for
Illinois and
Mississippi
Canal, from
near Hennepin,
Ill., on Illinois
River, to Mis-
sissippi River
at Rock Island
with branch
feeder, etc.

Survey of
Illinois and
Michigan Canal
for purpose of
enlarging, etc.

Provido.

^a The Illinois and Mississippi Canal.

Mississippi
River, from
Head of Passes
to Cairo, etc.

Improving Mississippi River: That the sum of four million one hundred and twenty-three thousand dollars be, and is hereby, appropriated, or so much thereof as may be necessary out of any money in the Treasury not otherwise appropriated, for the improvement of the Mississippi River from the Head of the Passes to Cairo including the harbors of New Orleans, Natchez, Vicksburgh, Memphis, a lock at the mouth of Bayou, Plaquemine, Louisiana, and the rectification of the Red and the Atchafalaya Rivers at the mouth of Red River; six hundred thousand dollars from Cairo to the Illinois River including Alton Harbor on which a sum not exceeding thirty-five thousand dollars shall be expended; and two hundred thousand dollars from the Illinois River to the Des Moines Rapids, including a stone and brush revetment at or near Quincy; which said sums shall be expended by the Secretary of War in accordance with the plans, specifications, estimates, and recommendations of the Mississippi River Commission created by the act approved June twenty-eighth, eighteen hundred and seventy-nine, or according to such plans, specifications, and estimates of the Engineer Department of the Army which, having been approved by the Secretary of War, may be adopted by the said Mississippi River Commission for such parts of the said river as the said commission may not have completed the survey of: *Provided*, That no portion of this appropriation shall be expended to repair or build levees for the purpose of reclaiming lands or preventing injury to lands by overflows: *Provided, however*, That the commission is authorized to repair and build levees if in their judgment it should be done as a part of their plan to afford ease and safety to the navigation and commerce of the river and to deepen the channel: *Provided*, That the Secretary of War shall prescribe such rules and regulations as may be necessary to secure a judicious and economical expenditure of said sums, and shall cause to be made and submitted to Congress annual reports, on or before January first, giving detailed statements of the work done, the expenditures made, and the effect of such work, together with such recommendations as he may deem it proper to lay before Congress. It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements, other than surveys and estimates, in carrying on the various works, as far as can be without actual detriment to the interest of the government, by contract. Where such works cannot be done by contract without injury to the public interest, they may be prosecuted by hired labor. Where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts

21 Stat., 37.

Provisos.

Levees.

Manner of
making im-
provements.

Proposals.
Contracts to
be made after
advertisement.

shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution of the work according to such contract, and for the proper payment of all liabilities incurred in the prosecution thereof for labor and material. Lowest bidder.

That whatever balance there may be on hand for the improvement of the mouth of Red River shall be expended by the Secretary of War according to the plans and recommendations of the Mississippi River Commission; and they are hereby authorized to expend so much of said balance as may be necessary in purchasing or constructing a dredge boat or boats, and in maintaining a navigable channel through the mouth of the Red River into the Mississippi River. Balance for improvement of mouth of Red River to be expended, etc.

That the power and authority granted to the Secretary of War under and by virtue of section four of the act of Congress approved June fourteenth, eighteen hundred and eighty, relating to wrecks and sunken vessels be, and the same are hereby, enlarged so that the Secretary of War may, in his discretion, sell and dispose of any such sunken craft, vessel, or cargo, or property therein, before the raising or removal thereof, according to the same regulations that are in the said act prescribed for the sale of the same after the removal thereof; and all laws and parts of laws inconsistent herewith are hereby repealed. Vol. 21, p. 197.
Ante, p. 330.
Vol. 26, p. 454.
Post, p. 583.
Vol. 30, pp. 1152, 1154.
Post, p. 889, 891.
Wrecks and sunken vessels may be sold before raising or removal.

That no tolls or operating charges whatsoever shall be levied or collected upon any vessel boats, dredges, craft, or other water-craft passing through any canal or other work for the improvement of navigation belonging to the United States. Tolls.

That authority is hereby given to the Secretary of War to expend the money [?] appropriated by the act approved March third, eighteen hundred and seventy-nine, in the construction of a harbor of refuge at Port Orford, on the Pacific coast, if in his opinion it be deemed judicious to do so. Harbor of refuge, Port Orford, Oreg.
Vol. 20, p. 372.
Ante, p. 297.
Vol. 29, p. 214.
Post, p. 761.

That the Secretary of War is hereby authorized and directed to settle the claims of Charles McCafferty and D. [M.] and C. P. Dull, contractors for locks numbered four and five on the Great Kanawha River, under contracts made in eighteen hundred and seventy-four, and eighteen hundred and seventy-five, and subsequently for work done by reason of changes in the contracts and for losses caused by such changes, and by extra work and other losses incurred from such and other causes beyond their control, and report what amount, if any, he finds Charles McCafferty, D. M. Dull, C. P. Dull; claims of, to be settled, etc.
Vol. 25, p. 8.
Post, p. 471.

^a This paragraph is amended by section 8 of the river and harbor act approved September 19, 1890, and sections 15, 19, and 20 of the river and harbor act approved March 3, 1899.

^b The act of 1879 appropriated \$150,000. By act of June 3, 1896, the unexpended balance was made available for wharf construction at Graveyard Point, Port Orford Harbor.

to be due to said contractors at the next session of Congress.

Appropriation for ice harbor at St. Louis transferred and expended for improving channel of Mississippi River opposite St. Louis.

Cahokia Chute.

Secretary of War to ascertain and report as to purchase of franchise, etc., of Little Kanawha Navigation Co. Examinations and surveys.

That the unexpended sums heretofore appropriated for an ice-harbor at Saint Louis, Missouri, be, and the same are hereby transferred and appropriated, to be expended under the direction of the Secretary of War, for the improvement of the channel of the Mississippi River opposite the city of Saint Louis, Missouri, by repairing and raising the present low dam across the channel east of Arsenal Island, known as Cahokia Chute, and by the construction of such other works in or near said Cahokia Chute as may be deemed advisable to accomplish the same purpose.

That the Secretary of War be, and he is hereby, directed to ascertain and report to the next Congress upon what terms the franchise and property of the Little Kanawha Navigation Company, in West Virginia, can be obtained and conveyed to the United States.

That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, and estimates of cost of improvements proper to be made, at the following points, namely:

Youghiogheny River from McKeesport to Connells-ville, Pennsylvania.

Red River from its mouth to Fulton.

Little River and Saline [^a], Arkansas.

Alameda Creek, Alameda County, California.

Norwalk Harbor, Connecticut.

Harbor at Cedar Keys, Florida.

Connecticut River from Bellows Falls, Vermont, to Pittsburgh, New Hampshire.

Newton Creek, Camden County, New Jersey.

Pensaukin Creek, Camden and Burlington Counties, New Jersey.

Milford Haven (an estuary), Virginia.

Quantico Creek, Virginia.

Piankatank River, Virginia.

Sangamon River, Illinois, from its mouth to Petersburg.

Shoal between Dauphin Island and Cedar Point, Alabama.

Gowanus Creek at Brooklyn, New York.

Yallabusha River above Grenada, Mississippi.

Loosacoona River, a tributary of the Yallabusha, Mississippi.

The channel known as the Old River Bed, leading from Cuyahoga River to the harbor of refuge now under construction at Cleveland, Ohio.

Atchafalaya River between Berwick's Bay and the Gulf of Mexico; and, if made, to be accompanied with a report showing the cost of deepening the channel of said river.

^a Saline Creek, a tributary of Little River.

Erratum, House Doc. No. 425, Fifty-eighth Congress, third session.

[To be inserted at page 385 of Volume I.]

Fifteenth line above first footnote, for tuxet Harbor, Rhode Island.	Pawtucket River, Rhode Island,	read	Paw-
---	--------------------------------	------	------

The channel of the Saint John's River at its entrance into and exit out of Lake Monroe, and between Lake George and Lake Monroe, for straightening and improving the navigation of said river between the said laks [*sic*] Wetipkin Creek, Maryland.

Passaic River between Passaic and Paterson, New Jersey.

Minnesota River near the village of Belle Plain, with a view to prevent the washing away of the banks of said river opposite said village.

Androscoggin River below Brunswick, Maine.

Penobscot River and Bangor Harbor, Maine.

Resurvey of the breakwater at the mouth of Saco River, Maine.

Ohio River at Rochester and Freedom, Pennsylvania, for ice-breakers.

Delaware River above Philadelphia.

Delaware River in front of Philadelphia, by removal of Windmill or Smith's Island, or the bar above the same.

Madison Harbor, in the State of Connecticut.

Duck Island Harbor, in the State of Connecticut, with a view to the construction of a short breakwater for a harbor of refuge.

Harbor at Caseville, Michigan.

Harbor at Cross Village, Michigan

Santa Monica Bay, California.

Boston Harbor, Massachusetts, and especially Fore Point Channel and the channel leading to the wharves of the New York and New England Railroad.

Sandy Bay, Rockport, Massachusetts, with a view to the construction of a breakwater for a harbor of refuge [^a].

Pawtucket River, Rhode Island,

Black Rock Harbor, Connecticut.

Pawtucket River, Rhode Island,

Bissell's Cove, Rhode Island.

Redwood Slough, San Mateo County, California

White River, Arkansas, at the Memphis and Little Rock Railroad Bridge, near Duvall's Bluff, with a view of removing obstructions from the channel.

North Branch of the Susquehanna River from Pittston to Athens.

The sound [^b] between Beaufort and New River, and White Oak River to Smith's Mills, North Carolina.

For a channel inside the shoals along the coast of Florida, from Cedar Keys to Clear Water Harbor and Tampa, Florida.

The headland in the town of Hull, at the entrance to Boston Harbor, Massachusetts, being the northerly side

^a The project submitted pursuant to this item contemplated the construction of a national harbor of refuge of the first class.

^b Bogue Sound, etc.

of Telegraph Hill, south of Quarter Ledge, with a view to its protection by sea-wall or otherwise

Ice-harbor at Middleport, Meigs County, Ohio.

Clear Lake, Lake County, California

Sulphur River, Texas, from its mouth to Sulphur Station.

Pearl River, Mississippi, above Carthage

Stamford Harbor and Westport Harbor, Connecticut.

Edenton Bay, North Carolina

Ipswich River and Sandy Bay [^a], at the end of Cape Ann, Massachusetts.

Water-route to connect the Calcasieu River with Sabine Pass.

Illinois and Des Plaines River between La Salle and Joliet, in Illinois.

Shoal Harbor and Compton's Creek, New Jersey.

Stoneybrook Harbor, Suffolk County, New York.

Pocomoke River, Maryland, with a view to a cut-off in the bend just below Snow Hill

D'Arbonne River, Bayou Roundaway, and Bayou Vidal, Louisiana

Peekskill Harbor, on the Hudson River, New York.

Cumberland River and its principal tributaries above Pineville, Kentucky.

Extending the survey of the Louisa [Levisa] Fork of the Big Sandy River to Grundy Court-House, Virginia.

Minisceongo Creek at its outlet into the Hudson River, New York.

Saugerties Harbor on Hudson River, New York.

Branford Harbor, Connecticut

North River in front of Jersey City and Hoboken, to determine what is necessary to permanently deepen the channel on the New Jersey side

To open a passage between the north end of Indian River and Mosquito Lagoon, Florida.

Champlain River, Clinton County, New York, from the lake up to Champlain Town

For breakwater at Rouse's Point, on Lake Champlain, New York.

Ouachita River from Camden to Arkadelphia, Arkansas.

Big Bayou Metre [Meto], Arkansas, from its mouth up.

The Lewis, Humptulup, and Dawamish Rivers, Washington Territory.

Sebewaing Harbor, Michigan, resurvey, to obtain twelve feet of water in channel from Saginaw Bay.

Harbor at Ludington, Michigan, with a view to exam-

^a It being presumed that the requirements of the act respecting this item were fully met by the reports submitted upon examination and survey of Sandy Bay with a view to the construction of a breakwater for a harbor of refuge, required by a previous paragraph in this act, no further or additional report on the subject was made.

ination by a board of engineers and report of a plan, and expense of same, for making a harbor of refuge.

Wisconsin River from Portage to Merrill.

The lakes near the headwaters of the Cannon River in Rice and Le Sueur Counties, Minnesota, with a view to adding the same to the reservoir system of the Mississippi River and its tributaries.

Southold Harbor, Suffolk County, New York.

Channel-way of Peconic River entering Peconic Bay, and channel-way from Riverhead to Great Peconic Bay, Suffolk County, New York.

Channel from Pearsall's Dock to Flat Creek, in Hempstead Bay, Queens County, New York.

The source of the Minnesota River, near the foot of Big Stone Lake, with a view of its being added to the reservoir system of the Mississippi River and its tributaries.

Natalbany River, Louisiana.

Iowa River from Wapello to its mouth.

Delaware River between Trenton, New Jersey, and Port Jervis, New York.

Leipsic River, Delaware, from the Delaware River to the town of Leipsic.

Waccamaw River between Conwayborough, South Carolina, and Waccamaw Lake, North Carolina.

Broad River from Rutherfordton, North Carolina, to South Carolina line.

Tionesta Creek, Pennsylvania.

Harbors of Port Henry and Port Marshall, on Lake Champlain, New York.

Boquet River, New York.

Harbor of Cedar Keys, Florida, especially the northwest channel.

Saint Mark's River, Florida.

Isle of Wight and Upper Synepuxent Bay, Maryland and Indian River, Delaware, with the intervening land, with a view to connect their waters.

Monokin [Manokin] River from its mouth to Princess Anne.

Wicomico River [^a] from its mouth to Salisbury.

From Deal to Seabright, on the New Jersey coast, with a view to build a breakwater to protect the shore and harbor at Long Branch.

The shoal between Dauphin Island and Cedar Point, Alabama, with a view of ascertaining the most practicable point for making a channel through the same of sufficient depth and width to afford a good and safe passage for steamboats and other vessels in the trade between the waters of Mobile Bay and other places on the Gulf of Mexico.

Newtown Creek from its mouth to Metropolitan avenue in Brooklyn, New York.

^a On the eastern shore.

Ouachita River from its mouth to Camden, Arkansas.

Clubfoot, Harlow, and Newport Rivers, North Carolina, on line of inland navigation to Beaufort Harbor.

The harbors of Monroe and Trenton, Louisiana, on the Ouachita River, with a view to prevent the caving of banks.

Mouth of Lake Palmyra where it enters the Mississippi River.

Bayou La Fourche, Louisiana.

Alligator River, North Carolina.

Black River, North Carolina.

Sound *between Morehead City, in Carteret County, North Carolina.

Town Creek [^a], Beaufort County, North Carolina.

Pungoteague Creek, from Bogg's Wharf to the Warehouse, Accomack County, Virginia.

Bay River, North Carolina.

Hull's Creek, Northumberland County, Virginia.

Hunting Creek, Accomack County, Virginia.

Great Wicomico from Cedar Point to Indian Point, Northumberland County, Virginia.

Cape Fear River above Fayetteville, North Carolina:

Piscataway Creek, Essex County, Virginia.

Cherrystone Creek, Virginia.

Roanoke River, North Carolina.

Calumet River, Illinois and Indiana.

The stone formation in the Kankakee River at Mokense, Illinois; and if made, to be accompanied by an estimate of the cost of removing the same.

That the Secretary of War shall cause to be made a survey and estimate of the cost of excavating a channel through the Grand and Little Chains in the Ohio River sufficient to pass boats and give a depth of six feet at low water.

Piscataway Creek, Prince George's County, Maryland.

Chicamuxen Creek, Charles County, Maryland.

Port Tobacco Creek, Charles County, Maryland.

Dividing Creek [La Trappe River], Talbot County, Maryland.

Taggart's [Tygarts] Valley River, West Virginia, above Grafton to the Three Forks of Buckhannon, and furnish an estimate of the cost of removing the obstructions in the Buckhannon River from the town of Buckhannon to the Three Forks of said river.

Pecatonica River, from Argyle to Wayne, La Fayette County, Wisconsin.

For the extension and completion of the breakwater, near the third, in Portsmouth Harbor, New Hampshire, connecting Goat Island and New Castle.

At and near the mouth of the Great Bay, so-called, with a view to increasing the depth of the flow of water and

^a Empties into Pamlico River 16 miles below Washington; sometimes called "Bath Creek."

improvement of the navigation of the Piscataqua River and its tributaries.

Steele's Bayou, in Mississippi, from its mouth to Swan Lake, in Washington County.

The Yazoo Pass [^a], including examination and estimate as to cost and feasibility of putting a lock so as to connect the Pass with the Mississippi River.

Roebuck Lake, a tributary of the Yazoo River, in Le Flore County, Mississippi.

Survey of Black River from its mouth to Trinity, Louisiana, with a view of improving its navigation by shortening its channel by cut-off.

Red River, Louisiana, from the Atchafalaya to Fulton, Arkansas, including relieving the town of Alexandria from the encroachments of the river, removing snags from Cane River, and closing the outlet of the river known as "Sale and Murphy Canal."

Bayou Pierre, Louisiana, by removing raft therefrom.

Loggy Bayou, Lake Bisteneau, and the Dorcheat, Louisiana; Cane River, Louisiana; and Petit Anse Bayou, Louisiana.

To make such survey and report as to the cost of placing locks and dams on the Cumberland River from Nashville, Tennessee, to the Cincinnati Southern Railroad in Kentucky, as in the opinion of the Secretary of War is necessary to complete the examination and report of said river; said report to be—

First, as to the practicability of the work;

Second, its probable cost from Nashville to the Kentucky line;

Third, the cost from the Kentucky line to the Cincinnati Southern Railroad.

Fourth, the cost of locking and damming so as to improve Smith's Shoals.

The river Brandywine from its mouth to the Market street bridge in the city of Wilmington, Delaware.

That in every case where surveys are made, the report thereon shall embrace such information concerning the commercial importance, present and prospective, of the improvement contemplated thereby and such general commercial statistics as the Secretary of War may be able to procure: *Provided*, That no survey shall be made of any of the above harbors or rivers until the Chief of Engineers shall have directed a preliminary examination of the same by the local engineer in charge of the district, and then only when such local engineer shall have made such examination and shall have reported to said Chief of Engineers that in his judgment said harbor or river is worthy of improvement and that the work is a public necessity. For making such preliminary examinations a sum not exceeding ten thousand dollars may be used out

Preliminary
examinations.

Appropriation.

^a Yazoo Pass is a bayou and lake (Moon Lake) formerly connecting the waters of Mississippi River near Delta, Miss., with Yazoo River, through Coldwater River.

Proviso.

of the amount appropriated for surveys: *Provided further*, That so much of said sum herein provided for surveys as may be necessary shall be used for continuation of the survey of the Arkansas River from Fort Gibson to Wichita, Kansas.

Appropriations immediately available.

That all moneys hereby appropriated shall be immediately available.

J. WARREN KEIFER

Speaker of the House of Representatives.

DAVID DAVIS,

President of the Senate pro tempore.

IN THE HOUSE OF REPRESENTATIVES,

August 2, 1882.

The President of the United States having returned to the House of Representatives, in which it originated, the bill (H. R. 6242) "making appropriations for the construction, repair, and preservation of certain works on rivers and harbors, and for other purposes," with his objections thereto, the House of Representatives proceeded in conformity with the Constitution to reconsider the same and has,

Resolved, That the bill do pass, two-thirds of the House of Representatives agreeing to pass the same.

Attest:

EWD. MCPHERSON,

Clerk.

IN THE SENATE OF THE UNITED STATES,

August 2, 1882.

The Senate having proceeded, in pursuance of the Constitution, to reconsider the bill entitled "An act making appropriations for the construction, repair, and preservation of certain works on rivers and harbors, and for other purposes," returned to the House of Representatives by the President of the United States, with his objections, and sent by the House of Representatives to the Senate with the message of the President returning the bill;

Resolved, That the bill do pass, two-thirds of the Senate agreeing to pass the same.

Attest:

F. E. SHOBER,

Acting Secretary.

Aug. 7, 1882.
Vol. 22, p. 302.

CHAP. 433.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-three, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and eighty-three, namely:

Appropriations.
Sundry civil expenses.

* * * * *

For the Mississippi River Commission as follows;

For salaries and traveling expenses of the Commission, office expenses, and reduction of work; for continuation of surveys and gaugings of the Mississippi River and its tributaries; for permanent gauge-stations and borings; and for publication of maps and results, one hundred and fifty thousand dollars; and an itemized statement of the expenditure of this sum shall be included with the annual report of the Commission to Congress.

Mississippi River Commission.

Salaries, traveling expenses, etc.

Itemized statement of expenditure to be made to Congress.

* * * * *

And to pay to Isaac A. Sylvester, for the losses and damages sustained by him on account of the collision of the United States sloop of war Lancaster with the drill-platform and sloop Derry, at Gangway Rock, Portsmouth, New Hampshire, two thousand dollars in full satisfaction thereof.

Payment to Isaac A. Sylvester for damage to plant in Portsmouth Harbor, N. H.

* * * * *

Approved, August 7, 1882.

CHAP. 454.—An Act For the relief of certain laborers employed upon Government works.

Aug. 7, 1882.
Vol. 22, p. 734.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War of the United States is hereby authorized and directed to pay to the laborers who worked upon the Government improvements upon the Fox River, in the State of Wisconsin, under or employed by Day, Call and Company (or subcontractors under them), late contractors with the Government in the improvement of the Lower [Lower] Fox River, in the State of Wisconsin the amount due each of such laborers, respectively, for work, labor, and services by them done and performed, respectively, upon and about said improvements as aforesaid, out of and from any moneys actually earned by said Day, Call and Company (or subcontractors under them) under their said contract with the Government, or for work done and materials furnished by said Day, Call and Company (or subcontractors under them), and which have not been paid for by the Government, and which may be withheld by the Government, from the said Day, Call and Company on their said contract as a forfeiture or otherwise: *Provided, however,* That if the amount thereof is not sufficient to pay in full the amount due to such laborers, respectively, then to pay said laborers pro rata. Such payments may be made after giving notice four weeks successively in some newspaper published in the county of Outagamie [Outagamie], Wisconsin, for such laborers to present and prove their claims: *Provided further,* That such payments be made in the State of Wisconsin, by and through some engineer office of the United States designated by

Payment to certain laborers upon Government improvements on Fox River, Wis., etc.

Provisos.

the Secretary of War: *And provided further*, That no money shall be paid by virtue of the authority of this act except out of such sum or sums as in the opinion of the Secretary of War may be lawfully withheld from the assignee in bankruptcy of said Day, Call and Company as a forfeiture under the terms and conditions of their said contract.

Approved, August 7, 1882.

Mar. 3, 1883. **CHAP. 141.**—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-three, and for prior years, and for those certified as due by the accounting officers of the Treasury in accordance with section four of the Act of June fourteenth, eighteen hundred and seventy-eight, heretofore paid from permanent appropriations, and for other purposes.

Deficiency appropriations, 1883, for prior years, and under sec. 4, act June 14, 1878.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the objects hereinafter stated, namely:

1883.

To supply deficiencies in the appropriations for the fiscal year eighteen hundred and eighty-three, as follows:

* * * * *

J. C. Burdick,
E. M. Wadsworth,
C. A. Peck, payment to.

18 Stat., 506.

To enable the Secretary of War to pay to J. C. Burdick eight hundred and twenty dollars, to E. M. Wadsworth eight hundred and twenty dollars, and to C. A. Peck eight hundred and twenty dollars, commissioners appointed under the authority of an act of Congress approved March third, eighteen hundred and seventy-five, entitled "An act to aid in the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin," for services in ascertaining and awarding the amount of damages by reason of the flowage of lands caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin.

* * * * *

Approved, March 3, 1883.

Mar. 3, 1883. **CHAP. 143.**—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-four, and for other purposes.

Appropriations.
Sundry civil expenses.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and eighty-four, namely:

* * * * *

For the Mississippi River Commission, as follows:

Mississippi
River Commis-
sion.

For salaries and traveling expenses, of the commission, office expenses, and reduction of work; for continuation of surveys and gaugings of the Mississippi River and its tributaries, for permanent gauge stations and borings, and for publication of maps and results, one hundred and fifty thousand dollars; and an itemized statement of the expenditure of this sum shall be included with the annual report of the commission to Congress.

* * * * *

Approved, March 3, 1883.

CHAP. 2.—An Act Making an appropriation for continuing the improvement of the Mississippi River.

Jan. 19, 1884.
Vol. 23, p. 1.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the sum of one million dollars be, and is hereby, appropriated or so much thereof as may be necessary, out of any money in the Treasury not otherwise appropriated, for the improvement of the Mississippi River, which said sum shall be expended, under the direction of the Secretary of War, in accordance with the plans, specifications, estimates, and recommendations of the Mississippi River Commission created by an act entitled "An act to provide for the appointment of a Mississippi River Commission for the improvement of said river from the Head of the Passes, near its mouth, to its head-waters," approved June twenty-eighth, eighteen hundred and seventy-nine: *Provided*, That the money hereby appropriated shall be used solely for the improvement of the navigation of the Mississippi River and no part thereof shall be expended with the view to the improvement of private property.

Appropriation, continuing improvement of Mississippi River.

Proviso.

Approved, January 19, 1884.

CHAP. 11.—An Act Making appropriation to supply deficiency in amount required for expenditure to June thirtieth, eighteen hundred and eighty-four, for examination and surveys required by Acts of March third, eighteen hundred and seventy-five, and June nineteenth, eighteen hundred and seventy-eight, to ascertain depth of water and width of channel of South Pass of Mississippi River, also for gauging the waters of the Mississippi River and its tributaries.

Mar. 12, 1884.
Vol. 23, p. 4.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be and the same are hereby appropriated out of any money in the Treasury not otherwise appropriated, to wit:

Deficiency appropriations, South Pass of Mississippi River.

18 Stat., 465.
20 Stat., 169.

To supply deficiency in amount required for expenditure to June thirtieth, eighteen hundred and eighty-four, for examinations and surveys required by the acts of March third, eighteen hundred and seventy-five and June nineteenth, eighteen hundred and seventy-eight, to ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at South Pass of the Mississippi River, and to enable the Secretary of War, to report to Congress during the maintenance of the work, six thousand dollars.

Gauging waters of Mississippi River.
16 Stat., 598.

To supply deficiency in amount required for expenditure to June thirtieth, eighteen hundred and eighty-four, for gauging waters of lower Mississippi River and its tributaries: For annual expense of gauging the waters of the Mississippi River and its tributaries, continuing observations of the rise and fall of the river and its chief tributaries, as required by Joint Resolution of February twenty-first, eighteen hundred and seventy-one, two thousand one hundred dollars.

SEC. 2. That the moneys hereby appropriated shall be immediately available.

Approved, March 12, 1884.

May 1, 1884.
Vol. 23, p. 15.

CHAP. 37.—An Act To provide for certain of the most urgent deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-four, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * *

* * * * *

Voluntary service for Government, or employment of personal service other than that authorized by law, prohibited; exceptions.

* * * and hereafter no Department or officer of the United States shall accept voluntary service for the Government or employ personal service in excess of that authorized by law except in cases of sudden emergency involving the loss of human life or the destruction of property.

* * * * *

Approved, May 1, 1884.

June 11, 1884.
Vol. 23, p. 531.

CHAP. 7 —An Act Authorizing and empowering the Secretary of War to reconvey to Thomas Mulvihill certain lands erroneously conveyed by him to the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War, acting for and on behalf of the United States of America, be, and he is hereby, authorized and empowered to reconvey to Thomas Mulvihill, by deed of conveyance duly executed, all the right, title, and interest of the United States of America in and

Thomas Mulvihill.
Relief in re-land, Davis Island dam, Ohio River.

to such part or portion of the lot of land [at Davis Island dam, Ohio River] as was erroneously conveyed to the United States of America by said Thomas Mulvihill by deed dated October twentieth, anno Domini eighteen hundred and seventy-seven, and as recommended in a message from the President of the United States to Congress bearing date the thirteenth day of December, anno Domini eighteen hundred and eighty-three.

Approved, June 11, 1884.

[39.] Joint Resolution Authorizing the Secretary of War to lease certain lands to the board of fish commissioners of the State of Michigan. June 26, 1884.
Vol. 23, p. 275.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War is directed and hereby duly authorized to lease to the State board of fish commissioners of the State of Michigan the parcel or strip of land lying north of and adjoining the Saint Mary's Falls Ship Canal, and between said canal and the rapids of the Saint Mary's River, in the county of Chipewa and State of Michigan, including such portion of the lands reserved for the use of the canal as are not now needed for canal purposes, upon condition that the premises so leased are to be used solely by said commissioners for the culture and propagation of food-fishes and the residence of the employees of the commission, and that the use of said premises by them shall in no way interfere with the use of the same lands for canal purposes whenever required by the United States Government. The Secretary of War is requested to cause the removal of all persons now occupying any part of the said premises on or before July first, anno Domini eighteen hundred and eighty-four. The lease to said commissioners shall be rent free, and the buildings to be erected by said commissioners shall be first approved by the engineer officer in charge of the canal.

State board
of fish com-
missioners of
Michigan;
lease of cer-
tain lands to.

Approved, June 26, 1884.

CHAP. 229.—An Act Making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes.

July 5, 1884.
Vol. 23, p. 133.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby appropriated, to be paid out of any money in the Treasury not otherwise appropriated, and to be expended under the direction of the Secretary of War, for the construction, completion, repair, and preservation of the public works hereinafter named:

River and
harbor appro-
priations.

- Portland. Improving harbor at Portland, Maine: Continuing improvement, thirty thousand dollars.
- Bangor. Improving harbor at Bangor and Penobscot River, Maine: Continuing improvement, twenty thousand dollars.
- Rockland. Improving harbor at Rockland, Maine: Continuing improvement, forty thousand dollars.
- Breakwater,
Saco River. Improving breakwater at the mouth of Saco River, Maine: Continuing improvement and repairs, fifteen thousand dollars.
- Portsmouth. Improving harbor at Portsmouth, New Hampshire: Continuing improvement, twenty thousand dollars.
- Burlington. Improving harbor at Burlington, Vermont: Continuing improvement, twenty-five thousand dollars; for repairs, twenty-five thousand dollars.
- Boston. Improving harbor at Boston, Massachusetts: Continuing improvement, five thousand dollars.
- Nantucket. Improving harbor at Nantucket, Massachusetts: Continuing improvement, ten thousand dollars.
- Newbury-
port. Improving harbor at Newburyport, Massachusetts: Continuing improvement, forty thousand dollars.
- Scituate. Improving harbor at Scituate, Massachusetts: Continuing improvement, ten thousand dollars.
- Plymouth. Improving harbor at Plymouth, Massachusetts: Continuing improvement, ten thousand dollars.
- Province-
town. Improving harbor at Provincetown, Massachusetts: Continuing improvement, two thousand dollars.
- Woods Hole. Improving harbor at Wood's Holl, Massachusetts: Continuing improvement, twenty-five thousand dollars.
- Wareham. Improving harbor at Wareham, Massachusetts: Continuing improvement, ten thousand dollars.
- National har-
bor of refuge,
Sandy Bay,
Cape Ann; con-
struction of,
authorized.
Proviso. Constructing a national harbor of refuge of the first class at Sandy Bay, Cape Ann, Massachusetts, one hundred thousand dollars: *Provided*, That a board of three engineers, to be appointed by the Secretary of War, shall decide that this point is the best location on the coast between Boston and Portland for such a harbor that shall serve all the uses for which it may be needed.
- Breakwater,
Block Island. Improving breakwater at Block Island, Rhode Island: Continuing improvement, fifteen thousand dollars.
- Newport. Improving harbor at Newport, Rhode Island: Continuing improvement, twenty thousand dollars.
- Bridgeport. Improving harbor at Bridgeport, Connecticut: Continuing improvement, five thousand dollars.
- Breakwater,
New Haven. Improving breakwater at New Haven, Connecticut: Continuing improvement, forty thousand dollars.
- New Haven
Harbor. Improving harbor at New Haven, Connecticut: Continuing improvement, ten thousand dollars.
- New London. Improving harbor at New London, Connecticut: Continuing improvement, two thousand dollars.
- Norwalk. Improving harbor at Norwalk, Connecticut: Continuing improvement, five thousand dollars.
- Stonington. Improving harbor at Stonington, Connecticut: Continuing improvement, ten thousand dollars.

Improving harbor at Black Rock, Connecticut: Commencing new improvement, twenty thousand dollars.	Black Rock.
Improving harbor at Buffalo, New York: Continuing improvement, one hundred thousand dollars.	Buffalo.
Improving Buttermilk Channel, New York: Continuing improvement, ten thousand dollars.	Buttermilk channel.
Improving harbor at Canarsie Bay, New York: Continuing improvement, five thousand dollars.	Canarsie Bay.
Improving Sheepshead Bay, New York: Continuing improvement, five thousand dollars.	Sheepshead Bay.
Improving harbor at Charlotte, New York: Continuing improvement, twenty thousand dollars.	Charlotte.
Improving harbor at Dunkirk, New York: Continuing improvement, ten thousand dollars, to restore broken breakwater and for dredging.	Dunkirk.
Improving harbor at Flushing Bay, New York: Continuing improvement, ten thousand dollars.	Flushing Bay.
Improving channel in Gowanus Bay, New York: Continuing improvement, five thousand dollars.	Gowanus Bay.
Improving harbor at Great Sodus Bay, New York: Continuing improvement, ten thousand dollars.	Great Sodus Bay.
Improving harbor at Greenport, New York: Continuing improvement, ten thousand dollars.	Greenport.
Improving harbor at Little Sodus Bay, New York: Continuing improvement, ten thousand dollars.	Little Sodus Bay.
Improving harbor at Oak Orchard, New York: Continuing improvement, five thousand dollars.	Oak Orchard.
Improving harbor at Ogdensburg, New York: Continuing improvement, fifteen thousand dollars.	Ogdensburg.
Improving harbor at Oswego, New York: Continuing improvement, eighty thousand dollars.	Oswego.
Improving harbor at Rondout, New York: Continuing improvement, one thousand dollars.	Rondout.
Commencing construction of breakwater at Rouse's Point, on Lake Champlain, New York, thirty-five thousand dollars.	Breakwater, Rouse Point.
Improving harbor at Saugerties, New York, five thousand dollars.	Saugerties.
Improving channel between Staten Island and New Jersey: Continuing improvement, ten thousand dollars.	Staten Island-New Jersey channel.
Improving harbor at Raritan Bay, New Jersey: Continuing improvement, twenty thousand dollars.	Raritan Bay.
Improving harbor at Erie, Pennsylvania: Continuing improvement, fifty thousand dollars.	Erie.
Improving Delaware Breakwater, Delaware: Continuing improvement, seventy-five thousand dollars.	Delaware Breakwater.
Improving harbor at New Castle, Delaware: Continuing improvement, two thousand dollars.	Newcastle.
Improving harbor at Wilmington, Delaware: Continuing improvement, twenty-five thousand dollars.	Wilmington, Del.
Improving harbor at Baltimore, Maryland: Continuing improvement, two hundred and fifty thousand dollars.	Baltimore.

- Breton Bay. Improving harbor at Breton Bay, Maryland: Continuing improvement, three thousand dollars.
- Norfolk. Improving harbor at Norfolk, and its approaches, Virginia: Continuing improvement, twenty-five thousand dollars.
- Approach to Norfolk Harbor and United States navy-yard. Improving approach to Norfolk Harbor and the United States (Norfolk) navy-yard: Continuing improvement, the widening of the channel of the Elizabeth River between Lambert's Point and Fort Norfolk, fifty thousand dollars.
- Charleston, S. C. Improving harbor at Charleston, South Carolina, including Sullivan's Island: Continuing improvement, two hundred and fifty thousand dollars, of which sum five thousand dollars may be used in front of Mount Pleasant.
- Georgetown, S. C. Improving harbor at Georgetown, South Carolina: Continuing improvement, five thousand dollars.
- Brunswick, Ga. Improving harbor at Brunswick, Georgia: Continuing improvement, ten thousand dollars.
- Savannah. Improving harbor at Savannah, Georgia: Continuing improvement, two hundred thousand dollars.
- Cumberland Sound. Improving entrance to Cumberland Sound, Georgia and Florida: Continuing improvement, seventy-five thousand dollars.
- Apalachicola Bay. Improving Apalachicola Bay, Florida: Continuing improvement, ten thousand dollars.
- Pensacola. Improving harbor at Pensacola, Florida: Completing improvement, fifty-five thousand dollars.
- Cedar Keys. Improving harbor at Cedar Keys, Florida: Commencing improvement, five thousand dollars.
- Tampa Bay. Improving harbor at Tampa Bay, Florida: Continuing improvement, twenty thousand dollars.
- Mobile. Improving harbor and river at Mobile, Alabama: Continuing improvement, two hundred thousand dollars.
- Aransas Pass and Bay. Improving Aransas Pass and Bay up to Rockport and Corpus Christi, Texas: Continuing improvement, one hundred thousand dollars.
- Brazos Santiago. Improving harbor at Brazos Santiago, Texas: Continuing improvement of the bar and harbor, twenty-five thousand dollars.
- Bar, Neches River. For improving and deepening bar at the mouth of the Neches River, Texas: Completing the work, seven thousand dollars.
- Ship channel, Galveston Bay. Improving ship-channel in Galveston Bay, from Morgan's Cut to Boliver Channel: Continuing improvement, for which purpose the balance now remaining of the money heretofore appropriated for this work is hereby directed to be expended by the Secretary of War in the completion of said channel in accordance with the plans heretofore adopted, and in marking out said channel by piles or stakes, so as to enable navigators to find the same without difficulty: *Provided*, That no part of said money shall be so expended until the Secretary of War shall be satisfied that the Buffalo Bayou Ship Channel Company has relinquished or abandoned to the United States, for-
- Proviso.*
Vol. 20, pp. 367, 368.
Ante, p. 291.
Vol. 26, p. 456.
Post, p. 585.

ever, all their franchises and any and all right to collect or impose tolls or charges from any part of said ship-channel or Buffalo Bayou.

Improving Pass Cavallo Inlet to Matagorda Bay, Pass Cavallo Inlet.
Texas: Continuing improvement, fifty thousand dollars.

Improving harbor at Sabine Pass and Blue Buck Bar, Sabine Pass, and Blue Buck bar.
Texas: Continuing improvement, two hundred thousand dollars.

Improving harbor at Ashtabula, Ohio: Continuing improvement, twenty-two thousand five hundred dollars. Ashtabula.

Improving Black River Harbor, Ohio: Continuing improvement, ten thousand dollars. Black River (Lorain).

Improving harbor at Cleveland, Ohio: Continuing improvement, one hundred thousand dollars. Cleveland.

Improving harbor of refuge near Cincinnati, Ohio: Harbor of refuge near Cincinnati.
Completing improvement, seventeen thousand dollars.

Improving harbor at Fairport, Ohio: Continuing improvement, ten thousand dollars. Fairport.

Improving harbor at Huron, Ohio: Continuing improvement, seven thousand five hundred dollars. Huron.

Improving ice-harbor at the mouth of the Muskingum River, Ohio: Continuing improvement, fifty thousand dollars. Ice harbor, Muskingum River.

Improving harbor at Sandusky City, Ohio: Continuing improvement, twenty thousand dollars; one half of said sum to be expended in deepening the channel and the other half in the repair of existing works. Sandusky Harbor.

Improving harbor at Toledo, Ohio: Continuing improvement, twenty thousand dollars. And the Secretary of War is hereby directed to commence the work of making a straight channel for the Maumee River from a point on the east side of the mouth of said river through North Cape Point to Lake Erie, in accordance with the second plan recommended by John M. Wilson, major of engineers, on the nineteenth of November, eighteen hundred and eighty one; and for that purpose the sum of twenty five thousand dollars is hereby appropriated. Toledo Harbor.

Improving harbor at Michigan City, Indiana: Continuing improvement, fifty thousand dollars; of which sum ten thousand dollars are to be expended on the inner harbor and forty thousand dollars on the outer harbor. Michigan City.

Improving harbor at Calumet, Illinois: Continuing improvement, twenty thousand dollars. Calumet.

Improving harbor at Chicago, Illinois: Continuing operations at outside harbor, dredging in outer harbor, and constructing exterior breakwater, one hundred thousand dollars. Chicago.

Improving harbor at Waukegan, Illinois: Continuing improvement, twenty thousand dollars. Waukegan.

Improving ice harbor at Belle River, Michigan: Continuing improvement, two thousand dollars. Belle River, ice harbor.

Improving harbor at Black Lake, Michigan: Continuing improvement, fifteen thousand dollars. Black Lake (Holland).

- Charlevoix. Improving harbor at Charlevoix and entrance to Pine Lake, Michigan: Continuing improvement, ten thousand dollars.
- Pentwater Harbor. Improving Pentwater Harbor, Michigan: Continuing improvement, fifteen thousand dollars.
- Cheboygan. Improving harbor at Cheboygan, Michigan: Continuing improvement, five thousand dollars.
- Frankfort. Improving harbor at Frankfort, Michigan: Continuing improvement, five thousand dollars.
- Grand Haven. Improving harbor at Grand Haven, Michigan: Continuing improvement, fifty thousand dollars.
- Sand Beach (Harbor Beach). Improving harbor of refuge, Sand Beach, Lake Huron, Michigan: Continuing improvement, including dredging the harbor, seventy five thousand dollars.
- Ludington. Improving harbor at Ludington, Michigan: Continuing improvement, ten thousand dollars.
- Manistee. Improving harbor at Manistee, Michigan: Continuing improvement, ten thousand dollars.
- Muskegon. Improving harbor at Muskegon, Michigan: Continuing improvement, twenty thousand dollars.
- Grand Marais. Improving Grand Marais Harbor, Michigan: Continuing improvement, thirty-five thousand dollars.
- Ontonagon. Improving harbor at Ontonagon, Michigan: Continuing improvement, fifteen thousand dollars.
- St. Joseph. Improving harbor at Saint Joseph, Michigan: Continuing improvement, fifteen thousand dollars.
- Marquette. Improving Marquette Harbor, Michigan: Continuing improvement, five thousand dollars.
- Saugatuck. Improving harbor at Saugatuck, Michigan: Continuing improvement, four thousand dollars.
- South Haven. Improving harbor at South Haven, Michigan: Continuing improvement, seven thousand five hundred dollars.
- White River. Improving harbor at White River, Michigan: Continuing improvement, ten thousand dollars.
- Harbor of refuge, Portage Lake. Improving harbor of refuge at Portage Lake, Michigan; twelve thousand five hundred dollars.
- Ahnapee. Improving harbor at Ahnapee, Wisconsin: Continuing improvement, fifteen thousand dollars.
- Green Bay. Improving harbor at Green Bay, Wisconsin: Continuing improvement, ten thousand dollars.
- Kenosha. Improving harbor at Kenosha, Wisconsin: Continuing improvement, five thousand dollars.
- Kewaunee. Improving harbor at Kewaunee, Wisconsin: Continuing improvement, eighteen thousand dollars.
- Manitowoc. Improving harbor at Manitowoc, Wisconsin: Continuing improvement, fifteen thousand dollars.
- Menominee. Improving harbor at Menominee, Wisconsin: Continuing improvement, ten thousand dollars.
- Harbor of refuge, Milwaukee Bay. Improving harbor of refuge at Milwaukee Bay, Wisconsin: Continuing improvement, eighty-five thousand dollars.
- Oconto. Improving harbor at Oconto, Wisconsin: Continuing improvement, fifteen thousand dollars.

- Improving harbor at Pensaukee, Wisconsin: Continuing improvement, five thousand dollars. Pensaukee.
- Improving harbor at Stockholm, Lake Pepin, Wisconsin: Continuing improvement, fifteen thousand dollars. Stockholm Harbor, Lake Pepin.
- Improving harbor at Port Washington, Wisconsin: Continuing improvement, ten thousand dollars. Port Washington.
- Improving harbor at Racine, Wisconsin: Continuing improvement, seven thousand dollars. Racine.
- Improving Superior Bay and Harbor, Wisconsin; and also the channel of the Saint Louis River through said bay, forty-five thousand dollars. Superior Bay and Harbor.
- Improving harbor at Sheboygan, Wisconsin: Continuing improvement, twenty-eight thousand dollars. Sheboygan.
- Improving harbor of refuge at entrance of Sturgeon Bay Canal, Wisconsin: Continuing improvement, ten thousand dollars. Harbor of refuge, Sturgeon Bay.
- Improving harbor at Two Rivers, Wisconsin: Continuing improvement, eight thousand dollars. Two Rivers.
- Completing ice-harbor at Dubuque, Iowa: Continuing improvement, twenty thousand dollars. Ice harbor, Dubuque.
- Improving harbor at Duluth, Minnesota: Continuing improvement, forty-five thousand dollars. Duluth.
- Improving harbor at Grand Marais, Minnesota: Continuing improvement, ten thousand dollars. Grand Marais.
- Improving harbor at Humboldt, California: Continuing improvement, sixty-two thousand five hundred dollars. Humboldt.
- Improving harbor at Oakland, California: Continuing improvement, one hundred and thirty-nine thousand six hundred dollars; of which sum thirty-nine thousand six hundred dollars is to pay for land condemned for the purpose of constructing a tidal channel between the bay of San Leandro and the head of Oakland Harbor. Oakland.
- Improving harbor at Wilmington, California: Continuing improvement, fifty thousand dollars. Wilmington, Cal.
- Improving harbor at Redwood, California: three thousand dollars. Redwood.
- Improving Coos Bay, Oregon: Continuing improvement thirty thousand dollars. Coos Bay.
- Improving harbor at Yaquina Bay, Oregon: Continuing improvement, fifty thousand dollars. Yaquina Bay.
- Improving Lubec Channel, Maine: Continuing improvement, ten thousand dollars: *Provided*, That as much of the sum as may be necessary shall be expended for the removal of a rock in Eastport Harbor. Lubec Channel. *Provido*.
- Improving Moose-a-bec Bar Maine: Continuing improvement, ten thousand dollars. Moosabec bar.
- Improving Cocheco River, New Hampshire: Completing improvement, twenty-eight thousand dollars. Cocheco River.
- Improving Merrimac River at Rock's Bridge, Massachusetts: Continuing improvement, three thousand five hundred dollars. Merrimac River.

Taunton River.	Improving Taunton River, Massachusetts: Completing improvement, twenty-six thousand five hundred dollars.
Providence River.	Improving Providence River and Narragansett Bay, Rhode Island: Continuing improvement, eighty-five thousand dollars: <i>Provided</i> , That not exceeding one thousand dollars of said sum may be expended in removing obstructions at the mouth of the Pawtuxet River.
Narragansett Bay. <i>Proviso.</i>	
Pawtucket River. <i>Proviso.</i>	Improving Pawtucket River, Rhode Island: Continuing improvement, fifty thousand dollars: <i>Provided</i> , That this appropriation shall not become available until the officer in charge shall have reported that the rebuilding of Washington Bridge with good and sufficient draw-openings has been commenced.
Connecticut River.	Improving Connecticut River below Hartford, Connecticut: Continuing improvement, thirty-five thousand dollars.
Housatonic River.	Improving Housatonic River, Connecticut: Continuing improvement, two thousand five hundred dollars.
Thames River.	Improving Thames River, Connecticut: Continuing improvement, twenty-five thousand dollars.
Hell Gate.	For removing the reef at Hell Gate, New York, the sum of three hundred and sixty thousand dollars, or so much thereof as may be necessary for that purpose.
Gedney channel.	Deepening Gedney's Channel through Sandy Hook Bar, New York, two hundred thousand dollars.
Hudson River.	Improving Hudson River, New York: Continuing improvement, thirty thousand dollars.
Newtown Bay and Creek.	Improving Newtown Bay and Newtown Creek, New York: Continuing improvement, twenty thousand dollars.
Maurice River.	Improving Maurice River, New Jersey: Continuing improvement, seventeen thousand dollars.
Passaic River.	Improving Passaic River below Newark, and removing shoals in Newark Bay, New Jersey: Continuing improvement, twenty-five thousand dollars.
Passaic River.	Improving the Passaic River above Newark, New Jersey, three thousand dollars.
Raritan River.	For continuing the improvement of the Raritan River, thirty-five thousand dollars.
Allegheny River.	Improving Allegheny River, Pennsylvania: Continuing improvement, thirty-five thousand dollars.
Schuylkill River.	Improving Schuylkill River, Pennsylvania: Continuing improvement, twenty-five thousand dollars.
Delaware River. <i>Proviso.</i>	Improving Delaware River from Trenton, New Jersey to its mouth: Continuing improvement, two hundred thousand dollars: <i>Provided</i> , That not exceeding ten thousand dollars of said sum shall be expended above Bridesburg.
Choptank River.	Improving Choptank River, Maryland: Continuing improvement, five thousand dollars.
Susquehanna River.	Improving Susquehanna River above and below the railroad bridge, Maryland: Continuing improvement, twenty thousand dollars; of which sum five thousand dollars shall be expended for the completion of the channel

to Fishing Battery Light-House, and for repairing, strengthening, and extending the piers and breakwaters.

Improving Corsica Creek, Maryland: Continuing improvement, five thousand dollars. Corsica Creek.

Improving Wicomico River [a], Maryland, from its mouth to Salisbury, ten thousand dollars. Wicomico River.

Improving the Potomac River at Washington, five hundred thousand dollars; continuing improvement. Potomac River.

Improving harbor at entrance of Saint Jerome's Creek, Maryland: Continuing operations, fifteen thousand dollars. St. Jeromes Creek.

Improving Appomattox River, Virginia: Continuing improvement, twenty-five thousand dollars. Appomattox River.

Improving James River, Virginia: Continuing improvement on the plan for deepening the channel to twenty-two feet at mean low tide, seventy-five, thousand dollars. James River.

Improving Mattaponi River, Virginia: Continuing improvement, two thousand five hundred dollars. Mattaponi River.

Improving Rappahannock River, Virginia: Continuing improvement, twenty thousand dollars. Rappahannock River.

Improving York River, Virginia: Continuing improvement, twenty thousand dollars. York River.

Improving Dan River, Virginia: Continuing improvement above Danville, five thousand dollars. Dan River.

Improving Staunton River, Virginia: Continuing improvement, five thousand dollars. Staunton River.

Improving Big Sandy River, West Virginia and Kentucky, fifty thousand dollars; of which sum continuing improvement below the fork and completing the lock on the West Virginia side, forty thousand dollars; on Tug Fork, in West Virginia, five thousand dollars, and on

Lavisa [Levisa] Fork, in Kentucky, five thousand dollars. Tug Fork.

Improving Great Kanawha River, West Virginia; Continuing improvement, two hundred thousand dollars; of which sum seven thousand five hundred dollars are to be used on a harbor of refuge at the mouth of the river. Levisa Fork.

Improving Guyandotte River, West Virginia: Continuing improvement, two thousand dollars. Kanawha River.

Improving Monongahela River, West Virginia: Continuing improvement, forty-five thousand dollars. Guyandotte River.

For continuing the improvement of Little Kanawha River, West Virginia, the sum of thirty-one thousand dollars appropriated by the act of August second, eighteen

hundred and eighty-two, is made available. But no toll shall be collected by any person or corporation for this improved navigation; and such right, if any exist, shall be relinquished in manner satisfactory to the Secretary of War before the expenditure of said sum. Little Kanawha River.

Improving Buckhannon River, West Virginia, one thousand five hundred dollars. Buckhannon River.

22 Stat., 199.

22 Stat., 199.

22 Stat., 199.

^a On the eastern shore.

- Cape Fear River. Improving Cape Fear River above Wilmington, North Carolina: Continuing improvement, five thousand dollars.
- Improving Cape Fear River below Wilmington, North Carolina: Continuing improvement, two hundred thousand dollars.
- Beaufort. Improving harbor at Beaufort, North Carolina: Continuing improvement, twenty thousand dollars.
- Edenton Bay. Improving Edenton Bay, North Carolina, ten thousand dollars.
- Trent River. Improving Trent River, North Carolina: Continuing improvement, ten thousand dollars.
- Contentnea or Moccasin River. Improving Contentnea or Moccasin River, North Carolina: Continuing improvement, five thousand dollars.
- Currituck Sound. Improving Currituck Sound, North Carolina: Continuing improvement, five thousand dollars.
- Neuse River. Improving Neuse River, North Carolina: Continuing improvement, twenty thousand dollars.
- New River. Improving New River, North Carolina: Continuing improvement, five thousand dollars.
- Pamlico and Tar rivers. Improving Pamlico and Tar Rivers, North Carolina: Continuing improvement, five thousand dollars.
- Roanoke River. Improving Roanoke River, North Carolina: Continuing improvement, three thousand dollars.
- Scuppernong River. Improving Scuppernong River, North Carolina: Continuing improvement, two thousand dollars.
- Ashley River. Improving Ashley River, South Carolina: Continuing improvement, two thousand dollars.
- Edisto River. Improving Edisto River, South Carolina: Continuing improvement, five thousand dollars.
- Great Pee Dee River. Improving Great Pee Dee River, South Carolina: Continuing improvement, eight thousand dollars.
- Salkahatchie River. Improving Salkehatchee River, South Carolina: Continuing improvement, three thousand dollars.
- Waccamaw River. Improving Waccamaw River, South Carolina: Continuing improvement, six thousand dollars.
- Wappoo Cut. Improving Wappoo Cut, South Carolina: Continuing improvement, three thousand dollars.
- Wateree River. Improving Wateree River, South Carolina: Continuing improvement, five thousand dollars.
- Santee River. Improving Santee River, South Carolina: Continuing improvement, fifteen thousand dollars.
- Altamaha River. Improving Altamaha River, Georgia: Continuing improvement, fifteen thousand dollars.
- St. Jones River. Improving St. Jones River, Delaware: Continuing improvement, ten thousand dollars.
- Chattahoochee River. Improving Chattahoochee River, Georgia and Alabama: Continuing improvement, thirty-five thousand dollars.
- Coosa River. Improving Coosa River, Georgia and Alabama: Continuing improvement, fifty thousand dollars.
- Flint River. Improving Flint River, Georgia: Continuing improvement, twenty thousand dollars; of which sum fifteen

thousand dollars to be expended below Albany and five thousand dollars from Albany to Montezuma.

Improving Ocmulgee River, Georgia: Continuing improvement, three thousand dollars. Ocmulgee River.

Improving Oconee River, Georgia: Continuing improvement, three thousand dollars. Oconee River.

Improving Romerly Marsh, Georgia: Continuing improvement on present plan, ten thousand dollars. Romerly Marsh.

Improving Savannah River, Georgia: Continuing improvement below Augusta, fifteen thousand dollars. Savannah River.

Improving Apalachicola River, Florida: Continuing improvement, one thousand dollars. Apalachicola River.

Improving Caloosahatchie River, Florida: Continuing improvement, five thousand dollars. Caloosahatchie River.

Improving Choctawhatchee River, Florida and Alabama: Continuing improvement, fifteen thousand dollars; five thousand dollars thereof to be expended between the railroad bridge and Geneva, and ten thousand dollars thereof between Geneva and Newton, Alabama, to make that part of said river navigable at low-water stages. Choctawhatchee River.

Improving Conecuh-Escambia River, Florida and Alabama: Continuing improvement, twelve thousand dollars. Conecuh - Escambia River.

Improving Escambia River, Florida, three thousand dollars. Escambia River.

Improving the channel over the bar at the mouth of Saint John's River, Florida: Continuing improvement, one hundred and fifty thousand dollars. Bar, St. Johns River.

Improving the Upper Saint John's River, Florida, five thousand dollars. Upper St. Johns River.

Improving Suwanee River, Florida: Continuing improvement, five thousand dollars. Suwanee River.

Improving Volusia Bar, Florida: Continuing improvement, two thousand dollars. Volusia bar.

Improving Withlacoochee River, Florida: Continuing improvement, three thousand dollars. Withlacoochee River.

Improving Alabama River, Alabama: Continuing improvement, ten thousand dollars. Alabama River.

Improving Cahawba River, Alabama: Continuing improvement, ten thousand dollars. Cahawba River.

Improving Tallapoosa River, Alabama: Continuing improvement, ten thousand dollars. Tallapoosa River.

Improving Warrior River, Alabama: Continuing improvement, twelve thousand dollars. Warrior River.

Improving Tombigbee River, Alabama and Mississippi: Continuing improvement from Fulton to Vienna, ten thousand dollars, and below Vienna, fifteen thousand dollars. Tombigbee River.

Improving Black Warrior River, Alabama, from Tuscaloosa to Daniel's Creek, fifty thousand dollars. Black Warrior River.

Improving Big Sunflower River, Mississippi: Continuing improvement, five thousand dollars. Big Sunflower River.

Improving Noxubee River, Mississippi: Continuing improvement, seven thousand five hundred dollars. Noxubee River.

- Pascagoula River. Improving Pascagoula River, Mississippi: Continuing improvement, three thousand dollars.
- Pearl River. Improving Pearl River, Mississippi: Continuing improvement between Edinburg and Carthage, two thousand five hundred dollars; and below Jackson, including bar at the mouth, ten thousand dollars.
- Channel of Biloxi Bay. Improving channel of Biloxi Bay, Mississippi: Continuing improvement, for which purpose the balance of the money heretofore appropriated for the roadstead now on hand is hereby directed to be applied to the deepening of the channel from Mississippi Sound to the wharves at Biloxi.
- Tallahatchie River. Improving Tallahatchee River, Mississippi: Continuing improvement, three thousand dollars.
- Tchula Lake. Improving Tchula Lake, Mississippi: Continuing improvement, one thousand five hundred dollars.
- Steele Bayou. Improving Steele's Bayou, Mississippi, two thousand five hundred dollars.
- Big Black River. Improving Big Black River, Mississippi, five thousand dollars.
- Horn Island Pass. Improving Horn Island Pass, Mississippi, five thousand dollars.
- Yalobusha River. Improving Yallabusha River, Mississippi: Continuing improvement, two thousand dollars.
- Yazoo River. Improving Yazoo River, Mississippi: Continuing improvement ten thousand dollars.
- Bayou Black. Improving Bayou Black [^a], Louisiana: Continuing improvement five thousand dollars.
- Boeuf River. Improving Boeuf River, Louisiana: Continuing improvement, five thousand dollars.
- Bayou Bartholomew. Improving Bayou Bartholomew, Louisiana and Arkansas: Continuing improvement, five thousand dollars.
- Bayou Courtableau. Improving Bayou Courtableau, Louisiana: Continuing improvement, four thousand dollars.
- Bayou Teche. Improving Bayou Teche, Louisiana: Continuing improvement, six thousand five hundred dollars.
- Bayou D'Arbonne. Improving Bayou D'Arbonne, Louisiana; from mouth to Stein's Bluff, five thousand dollars.
- Bayou Pierre. Continuing examination and for the thorough survey of Bayou Pierre, Louisiana; eight thousand six hundred dollars.
- Loggy Bayou, Lake Bistenau, Dorcheat. Improving Loggy Bayou, Lake Bistenau, and the Dorcheat, Louisiana; five thousand dollars.
- Cane River. Improving Cane River, Louisiana; two thousand five hundred dollars.
- Bayou La-fourche. Improving Bayou La Fourche, Louisiana: Continuing improvement, five thousand dollars, including removing obstructions at the mouth.
- Calcasieu River. Improving Calcasieu River, Louisiana: Continuing improvement, six thousand five hundred dollars; to which is added the sum heretofore appropriated to be used at the mouth of the river.

^a Discharges into Bayou Boeuf, which latter empties into Berwick Bay (an enlargement of Atchafalaya River) at Morgan City.

- Improving Red River, Louisiana and Arkansas: Continuing improvement from the Atchafalaya to Fulton, Arkansas; seventy-five thousand dollars, to be expended as follows: Not exceeding fifteen thousand dollars for revetment to protect the harbor at Alexandria from damage by the current of the river: Not exceeding five thousand dollars to close the outlet of the river known as Sale and Murphy's Canal; the remainder (including whatever balance may remain unexpended from above improvements embraced in this paragraph) to be applied to the improvement of the main channel of the river. Red River.

Harbor at Alexandria.

Sale and Murphy Canal.
- Improving Tangipahoa River, Louisiana: Continuing improvement, two thousand dollars. Tangipahoa River.
- Improving Tensas River and Bayou Macon, Louisiana: Continuing improvement, four thousand dollars. Tensas River.
Bayou Macon.
- Improving mouth of the Brazos River, Texas: Continuing improvement, ten thousand dollars. Brazos River.
- Improving Buffalo Bayou, Texas: Continuing improvement, twenty-five thousand dollars. Buffalo Bayou.
- For survey of the Arkansas River from Little Rock to mouth, nineteen thousand dollars. Arkansas River.
- Improving Arkansas River at Pine Bluff, Arkansas; fifty-five thousand five hundred dollars.
- Improving Black River, Arkansas and Missouri; twenty thousand dollars, of which sum fifteen thousand dollars are to be expended for a snag-boat and five thousand dollars on the river. Black River.
- Improving Ouachita River, Louisiana and Arkansas, and Black River, Louisiana, including removing wrecks in the harbor of Monroe: Continuing improvement, fifteen thousand dollars. Ouachita River.
- Improving Saline River ^[a], Arkansas: Continuing improvement, five thousand dollars. Saline River.
- Improving White River, Arkansas: Continuing improvement and survey, thirty five thousand dollars. White River.
- Improving Saint Francis River, Arkansas: Continuing improvement, twelve thousand dollars; of which sum four thousand dollars are to be expended for a snag boat. St. Francis River.
- For removing obstructions in the Arkansas River from its mouth to Wichita, Kansas, thirty-six thousand dollars; and for the protection of the harbor at Fort Smith, Arkansas, five thousand dollars. Removal of obstructions from Arkansas River.
- Improving Big Hatchee River, Tennessee: Continuing improvement, two thousand five hundred dollars. Hatchee River.
- Improving Caney Fork River, Tennessee: Continuing improvement, three thousand dollars. Caney Fork River.
- Improving Clinch River, Tennessee: Continuing improvement, five thousand dollars. Clinch River.
- Improving Cumberland River, Tennessee and Kentucky: Continuing improvement below Nashville, includ-

Cumberland River, Tenn. and Ky.

^a A tributary of Ouachita River.

ing bar at mouth of the river, seven thousand five hundred dollars.

Cumberland
River above
Nashville.

For the improvement of the Cumberland River above Nashville, fifty thousand dollars; and such improvement shall be made according to the recommendations of Major W. R. King, engineer in charge, contained in the letter of the Secretary of War, March fifteenth, eighteen hundred and eighty-four, Senate Executive Document Number One Hundred and Twenty-nine, first session, Forty-eighth Congress.

French Broad
River.

Improving the French Broad River, in Tennessee: Continuing improvement, three thousand five hundred dollars.

Hiwassee Riv-
er.

Improving Hiwassee River, Tennessee: Continuing improvement, two thousand five hundred dollars.

South Forked
Deer River.

Improving South Forked Deer River, Tennessee: Continuing improvement, two thousand dollars.

Tennessee
River above
Chattanooga.

Improving Tennessee River above Chattanooga: Continuing improvement, three thousand dollars.

Tennessee
River, Ala. and
Ky.

Improving Tennessee River, Tennessee, Alabama, and Kentucky: Continuing improvement below Chattanooga (including Muscle Shoals and shoal at Reynoldsburg), three hundred and fifty thousand dollars.

South Fork
of Cumberland
River.

Improving South Fork of Cumberland River, Kentucky: Continuing improvement, four thousand dollars.

Kentucky
River.

Improving Kentucky River, Kentucky: Continuing improvement, two hundred and fifty thousand dollars.

Tradewater
River.

Improving Tradewater River, Kentucky: Continuing improvement, two thousand dollars.

Falls of Ohio
River at Louis-
ville.

Improving Falls of the Ohio River at Louisville, Kentucky: Continuing improvement in pursuance of the last plan of the engineer in charge; three hundred thousand dollars; of which sum such amount as may be necessary, not exceeding five thousand dollars, shall be expended in the erection of a stone pillar or pier on the southern side of the Indiana Chute, provided the engineer in charge shall decide that such a structure will aid in the navigation thereof.

Indiana
Chute.

Detroit Riv-
er.

Improving Detroit River, Michigan: Continuing improvement, two hundred thousand dollars.

Hay Lake
channel, St.
Marys River.

Improving Hay Lake Channel, Saint Mary's River, Michigan: Continuing improvement, one hundred and twenty-five thousand dollars.

Saginaw Riv-
er.

Improving Saginaw River, Michigan: Continuing improvement, fifty thousand dollars; of which sum twenty-five thousand dollars are to be used opposite Bay City for deepening the channel from the river into the bay, and remainder on the river above Bay City.

Channel, Bay
City.

Grand River,
below Grand
Rapids.

Improving Grand River below Grand Rapids, Michigan: Continuing improvement, twenty-five thousand dollars.

Cedar River.

Improving mouth and harbor of Cedar River, Michigan: Continuing improvement, fifteen thousand dollars.

- Improving Chippewa River and its mouth, Wisconsin: Continuing improvement, fifteen thousand dollars. Chippewa River.
- Improving Fox and Wisconsin Rivers, Wisconsin: Continuing improvement, one hundred and sixty thousand dollars; of which sum ten thousand dollars [^a] are to be used for maintaining the channel between Depere and Green Bay: *Provided*, That in order to carry into effect the river and harbor act of August second, eighteen hundred and eighty-two, for lowering the water in Lake Winnebago, the Secretary of War is hereby authorized to acquire for the United States, by purchase, voluntary or by condemnation under the laws of Wisconsin, as the case may be, the necessary lands and sites at the Menasha Dam; and so much of the foregoing sum hereby appropriated as may be necessary may be used for such purpose. Fox and Wisconsin rivers.
Channel, Depere and Green Bay.
Proviso,
Vol. 22, p. 203.
Ante, p. 375.
Vol. 25, p. 418.
Post, p. 508.
- Improving Saint Croix River, Wisconsin: Continuing improvement below Taylor's Falls, nine thousand dollars. St. Croix River.
- Improving Wabash River by lock and dam at Grand Rapids, Indiana and Illinois: Continuing improvement, thirty thousand dollars; also between Vincennes and Terre Haute, ten thousand dollars. Wabash River.
- Improving White River, Indiana: Continuing improvement below Hazleton, ten thousand dollars. White River.
- Improving Illinois River, Illinois: Continuing improvement, one hundred thousand dollars. Illinois River.
- Improving Calumet River, Illinois: Continuing improvement, fifty thousand dollars: *Provided, however*, That no part of said sum shall be expended until the right of way shall have been conveyed to the United States, free from expense, and the United States shall be fully released from all liability for damages to adjacent property-owners, to the satisfaction of the Secretary of War. Calumet River.
Proviso,
Vol. 33, p. 239.
Post, p. 1048.
- Improving Gasconade River, Missouri: Continuing improvement, five thousand dollars. Gasconade River.
- Improving the Red River of the North, Minnesota and Dakota: Continuing improvement, ten thousand dollars. Red River of the North.
- Improving Yellowstone River, Montana and Dakota: Continuing improvement between Glendive and the mouth of the river, twenty thousand dollars. Yellowstone River.
- Improving Sacramento and Feather Rivers, California: Continuing improvement, forty thousand dollars; one-half of which sum shall be expended on the Sacramento River and one-half on Feather River: *Provided*, That no part of said sum, or of the money now on hand to the credit of this fund, except what may be necessary for snagging and dredging operations, shall be used, except as herein provided, until the Secretary of War shall have been satisfied of the cessation of hydraulic mining on said rivers and their tributaries; and of the amount now on hand to the credit of the fund for the improvement of said Sacramento and Feather rivers.
Vol. 26, p. 668.
Post, p. 540.
Proviso.

^a The river and harbor act of Aug. 11, 1888, provides that this sum shall be used in buoing, straightening, and further deepening the channel between said cities.

- Appropriation for dredge boat. rivers, the sum of forty thousand dollars, or so much thereof as may be necessary, is hereby appropriated for the immediate construction of a first-class dredge-boat, to be used, in the discretion of the officer in charge, on the rivers emptying into Suisun and San Pablo Bays.
- San Joaquin River; Stockton and Mormon sloughs. Improving San Joaquin River and Stockton and Mormon Sloughs, California: Continuing improvement, twenty thousand dollars.
- Mokelumne River. Improving Mokelumne River, California, eight thousand five hundred dollars.
- Colorado River. Improving Colorado River, Nevada and California, and Arizona Territory, between Fort Yuma and a point thirty miles above Rioville, twenty-five thousand dollars.
- Mouth of Columbia River. Improving the mouth of the Columbia River, Oregon and Washington Territory: Commencing improvement, in accordance with the plan recommended by the majority of the board of engineers in eighteen hundred and eighty-two, one hundred thousand dollars.
- Columbia River, at Cascades. Improving Columbia River, at Cascades, Oregon: Continuing improvement, one hundred and fifty thousand dollars.
- Columbia and Willamette rivers. Improving Columbia and Lower Willamette Rivers below Portland, Oregon: Continuing improvement, one hundred thousand dollars.
- Upper Columbia and Snake rivers. Improving Upper Columbia and Snake Rivers, Oregon and Washington Territory: Continuing improvement, twenty thousand dollars.
- Willamette River above Portland. Improving Willamette River above Portland, Oregon: Continuing improvement, ten thousand dollars.
- Coquille River. Improving mouth of Coquille River, Oregon: Continuing improvement, ten thousand dollars.
- Chehalis River. Improving Chehalis River, Washington Territory: Continuing improvement, two thousand five hundred dollars.
- Cowlitz River. Improving Cowlitz River, Washington Territory: Continuing improvement, two thousand dollars.
- Skagit, Stillaguamish, Nooksak, Snohomish, and Snoqualmie rivers. Improving the Skagit, Stillaguamish, Nootsack Snohomish and Snoqualmie Rivers, Washington Territory: Continuing improvement, ten thousand dollars.
- Missouri River from mouth, etc. Improving Missouri River from its mouth to Sioux City, Iowa, including such harbors on said river as in the judgment of the board of engineers herein created will benefit commerce and navigation, five hundred thousand dollars.
- Missouri River Commission created. Vol. 32, p. 387. Post, p. 1000. Appointment of. That a Commission, to be called the Missouri River Commission [a] is hereby created, to consist of five members.
- That the President shall nominate and, by and with the advice and consent of the Senate, appoint five Commissioners, three of whom shall be selected from the Corps of Engineers of the Army and two from civil life, one of whom at least shall be a civil Engineer; and he shall in like manner fill any vacancy in said Commission; and he

^a This Commission is abolished by the river and harbor act approved June 13, 1902.

shall designate one of the Commissioners appointed from the Corps of Engineers to be president of the Commission. The Commissioners appointed from the Corps of Engineers shall receive no other pay or compensation than is allowed them by law, and the other two Commissioners shall each receive for their services pay at the rate of two thousand five hundred dollars per annum, out of any money appropriated for the Missouri River; and all said Commissioners shall remain in office subject to removal by the President of the United States.

Compensation.

That it shall be the duty of said Commission to superintend and direct such improvement of said river and to carry into execution such plans for the improvement of the navigation of said river from its mouth to its headwaters as may now be devised and in progress, and to continue and complete such surveys as may now be in progress, and to make such additional surveys, examinations, and investigations, topographical, hydrographical, and hydrometrical and to consider, devise, and mature such additional plan or plans, and all such estimates as may be deemed necessary and best, to obtain and maintain a channel and depth of water in said river sufficient for the purposes of commerce and navigation, and to accomplish the objects of this act, and to enable the Commission to perform the duties assigned them the Secretary of War is hereby authorized and directed to transfer to and place under the control and superintendence of said Commission all such vessels, barges, machinery, and instruments, and such plant as may now be provided, devised, or in use on said river, from appropriations heretofore made for said river, or other sources, and when thereto requested by said Commission to detail from the Corps of Engineers such officers and men as may be necessary, and to place in the charge of said Commission any such vessels, machinery, and instruments under his control as may be deemed necessary. And said Commission may, with the approval of the Secretary of War, employ such additional force and assistants, and provide, by purchase or otherwise, such additional vessels, boats, machinery, instruments, and means, as may be deemed necessary; to be paid for by appropriations made or to be made for said river.

Duties.

Powers.

That the said Commission shall, under the direction and with the approval of the Secretary of War, superintend, control, and expend for the purposes of this act all appropriations or unexpended balances heretofore made for the improvement of said river, and which may hereafter be made for said river, or so much thereof as may be necessary, and shall prepare and submit, through the Chief of the Engineer Corps to the Secretary of War, to be by him transmitted to Congress at the beginning of the regular session in December of each year, a full and detailed report of all their proceedings and actions, and of all such plans and systems of work as may now be de-

Expenditure of appropriations.

Report of proceedings of Commission.

vised and in progress and carried out by them, and of all such additional plans and systems of works as may be devised and matured by them, with full and detailed estimates of the cost thereof, and statements of all expenditures made by them; and the Secretary of War may detail from the Corps of Engineers or other corps of the Army an officer to act as secretary of the Commission, to aid them in their work; and all money hereby or hereafter appropriated for the improvement of said Missouri River shall be expended under the direction of the Secretary of War in accordance with the plans, specifications, and recommendations of said Commission when such plans, specifications, and recommendations shall have been approved by Congress.

Secretary to
Commission.

Missouri Riv-
er.

Improving Missouri River from Sioux City, Iowa, to Fort Benton Montana: Continuing improvement, one hundred and twenty-five thousand dollars; of which sum fifteen thousand dollars shall be used in the purchase of a snag-boat to be operated on the Missouri River above Sioux City and on the Yellowstone River.

Missouri River
above Missouri
River Falls.

For a survey of the Missouri River above the Missouri River Falls, at Fort Benton, fifteen thousand dollars.

Removal of
snags, etc., from
Missouri River.

For removing snags, wrecks, and other obstructions in the Missouri River, fifty thousand dollars.

Reservoirs at
headwaters of
Mississippi
River.

For continuing operations on the reservoirs at the headwaters of the Mississippi River, sixty thousand dollars: *Provided*, That the money hereby appropriated shall be used solely for the improvement of the navigation of the Mississippi River and its tributaries, and no part thereof shall be expended with the view to the improvement of private property.

Proviso.

Mississippi
River from St.
Paul to Des
Moines Rapids.

Improving Mississippi River from Saint Paul to Des Moines Rapids, including the harbors of Andalusia, Muscatine, and Fort Madison, and including work for the protection of the bank of the Mississippi River at Winona, Minnesota, and the prevention of its erosion caused by dams erected above the city to improve the navigation of the river: Continuing improvements, two hundred and fifty thousand dollars.

Lake City,
Minn.

Improving harbor at Lake City, Minnesota: Continuing improvement, fifteen thousand dollars.

Mississippi
River at Des
Moines Rapids.

Improving Mississippi River at Des Moines Rapids, Iowa: Continuing improvement, fifty thousand dollars; of which sum ten thousand dollars are to be used in the construction of a pier at the outer wall of the Des Moines Rapids Canal, in accordance with the recommendation of the Engineer Corps: *Provided*, That said pier shall not be made unless the Secretary of War shall decide that the railroad bridge at that place was built in conformity with the act of Congress authorizing its construction.

Proviso.

Dry dock at
Des Moines
Rapids Canal.

For the continuation of the construction of the dry-dock at the Des Moines Rapids Canal, on the Mississippi River, thirty thousand dollars.

Improving Mississippi River from Des Moines Rapids to the mouth of Illinois River, including the river at Quincy and Quincy Bay, and the removal of the bar at the mouth of Whipple Creek, in said bay: Continuing improvement, two hundred thousand dollars.

Mississippi River from Des Moines Rapids to mouth of Illinois River.

Improvements at the Falls of Saint Anthony, Minnesota: Repairs to and preservation thereof, ten thousand dollars.

Falls of St. Anthony.

Improving Mississippi River from the mouth of Illinois River to the mouth of the Ohio River, including the completion of Alton Harbor, and also, in the discretion of the Secretary of War, the improvement of the Illinois shore opposite the mouth of the Missouri River: Continuing improvement, five hundred and twenty thousand dollars; fifty thousand dollars of which sum shall be used in extending the work for the protection of the easterly bank of the Mississippi River at Cairo, Illinois, and the prevention of its wash or erosion, commencing at the southerly end of the present Government revetment work and continuing down stream.

Mississippi River from mouth of Illinois River to mouth of Ohio River.

Improving Mississippi River from the head of the passes to Cairo, including the improvement and preservation of the harbors of New Orleans, Natchez, Vicksburg, Greenville, Memphis, Hickman, and Columbus, the deflection of the waters of Red River from the Atchafalaya, and keeping open a navigable channel through the mouth of the Red River into the Mississippi River: Continuing improvement, one million three hundred and fifty thousand dollars; which sum together with the sums herein appropriated for the Mississippi River from the Des Moines Rapids to the mouth of the Ohio, shall be expended under the direction of the Secretary of War, in accordance with the plans, specifications, estimates, and recommendations of the Mississippi River Commission: *Provided*, That no portion of this appropriation shall be expended to repair or build levees for the purpose of reclaiming lands or preventing injury to lands by overflows: *Provided, however*, That the Commission is authorized to repair and build levees if in their judgment it should be done as a part of their plan to afford ease and safety to the navigation and commerce of the river and to deepen the channel: *Provided further*, That in view of the threatened injury to the harbor of Memphis and the Government property at that place and the necessity of immediate protection thereof the sum of two hundred thousand dollars or so much thereof as may be necessary shall be immediately applied to protect said harbor and property out of the foregoing appropriations.

Mississippi River from Head of Passes to Cairo.

Appropriation, to be expended under direction of Secretary of War.

Proviso.

Proviso.

Duties of Mississippi River Commission.

Proviso.

Snags, etc., Mississippi River.

Examinations and surveys at South Pass.

For removing snags, wrecks, and other obstructions in the Mississippi River, seventy-five thousand dollars.

For examinations and surveys at South Pass Mississippi River; To ascertain the depth of water and width of channel secured and maintained from time to time by

James B. Eads at South Pass of the Mississippi River, and to enable the Secretary of War to report during the maintenance of the work, ten thousand dollars.

Gauging waters of lower Mississippi.

For gauging the waters of the Lower Mississippi and its tributaries; Annual expense of gauging the waters of the Mississippi River, and its tributaries, continuing observations of the rise and fall of the river and its chief tributaries as required by joint-resolution of February twenty-first, eighteen hundred and seventy-one, five thousand dollars.

Surveys of Mississippi River between the Head of Passes and its headwaters.

For continuation of surveys of the Mississippi River between the head of the passes, near its mouth, and its headwaters now in progress; to make additional surveys and examinations of said river and its tributaries; to make such additional examinations and investigations, topographical, hydrographical, hydrometrical as are necessary for maturing a plan for the permanent improvement of the entire river, seventy-five thousand dollars.

Gauging waters of the Columbia River.

For gauging the waters of the Columbia River below Astoria, Oregon, and elsewhere on said river and its principal tributaries, at the discretion of the Secretary of War, one thousand dollars.

Ohio River.

Improving the Ohio River, continuing improvement, six hundred thousand dollars; of which sum, seventy thousand dollars, or so much thereof as may be necessary for the completion of the Davis Island Dam, shall be expended on that work; fifty thousand dollars shall be used in continuing work on the upper and lower dikes and other improvements at Grand Chain; and seven thousand five hundred dollars for the ice harbor at the mouth of the Great Kanawha and fifty thousand dollars or so much thereof as may be necessary for the improvement of the navigation of the river at Jeffersonville, and the protection of the Government property.

Completion of Davis Island dam.

Grand Chain. Ice harbor at mouth of Kanawha.

Secretary of War to prescribe rules, etc., to make report to Congress, in detail, all work, contracts, expenditures, etc., and in regard to public works in aid of commerce, etc.
Vol. 30, pp. 1151-1154.
Page 889.

SEC. 2. That the Secretary of War shall prescribe such rules and regulations as may be necessary to secure a judicious and economical expenditure of said sums, and shall cause to be made and submitted to Congress annual reports, on or before January first, giving detailed statements of the work done, contracts made, the expenditures thereunder or otherwise, and the effect of such work, together with such recommendations as he may deem it proper to lay before Congress. He shall also report to Congress, at its next session, all the instances in the United States in which piers, breakwaters, or other structures or works built or made by the United States in aid of commerce or navigation are used, occupied, or injured by a corporation or an individual, and the extent and mode of such use, occupation, or injury, and the facts touching the same [a]. He shall also report

^a See section 14 of the river and harbor act approved March 3. 1899.

whether any bridges, causeways, or structures, now erected or in process of erection do or will interfere with free and safe navigation, and if they do or will so interfere, to report the best mode of altering or constructing such bridges or causeways so as to prevent any such obstructions [a].

SEC. 3. That it shall be the duty of the Secretary of War to apply the money herein appropriated for improvements other than surveys and estimates, in carrying on the various works by contract or otherwise, as may be most economical and advantageous to the Government. Where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution and completion of the work according to such contract, and for the prompt payment of all liabilities incurred in the prosecution thereof for labor and material.

Duty of Secretary of War in expenditure of money for improvements, etc.

Contracts for work, how made.

SEC. 4. That no tolls or operating charges whatsoever shall be levied or collected upon any vessel or vessels, dredges, or other passing water-craft through any canal or other work for the improvement of navigation belonging to the United States; and for the purpose of preserving and continuing the use and navigation of said canals, rivers, and other public works without interruption, the Secretary of War, upon the application of the chief engineer in charge of said works, is hereby authorized to draw his warrant or requisition from time to time upon the Secretary of the Treasury to pay the actual expenses of operating and keeping said works in repair, which warrants or requisitions shall be paid by the Secretary of the Treasury, out of any money in the Treasury not otherwise appropriated: *Provided, however*, That an itemized statement of said expenses shall accompany the annual report of the Chief of Engineers [b].

Tolls not to be levied or collected, etc.

Payments for actual expenses of operating and keeping certain works in repair, authorized.

Provido.

SEC. 5. That out of the money herein appropriated for the Kentucky River the sum of two thousand dollars or so much thereof as may be necessary may be expended for the purchase of land for the construction of lock and dam at Beattyville; and so much thereof as may be necessary may also be expended for the same purpose at lock number six: *And provided further*, That the sum of six thousand dollars authorized by the act approved June fourteenth eighteen hundred and eighty to be expended

Appropriations for purchase of land for lock and dam at Beattyville, etc.

Provido.

^a Laws now in force for the protection of navigation interests against obstructions of this nature are contained in sections 9, 10, and 18 of the river and harbor act approved March 3, 1899.

^b Pursuant to instructions from the Chief of Engineers district engineers are required to submit each year, for action by the Department, projects and estimates of cost for operating and keeping in repair the works contemplated in this paragraph.

Removal of
dams in Yad-
kin River.
21 Stat., 190.

for the removal of dams in Yadkin River North Carolina may be used by the Secretary of War for acquiring the right of way by removal or otherwise of such dams as may be necessary for the contemplated improvement, the said right of way or removal to be obtained by agreement with the parties interested or in event of failure to make a reasonable agreement by condemnation as provided for by the laws of the State of North Carolina.

Material for
improvements
authorized,
how obtained.

SEC. 6 That whenever, in the prosecution and maintenance of the improvement of the Mississippi River and other rivers harbors and public works for which appropriations are herein made it becomes necessary or proper, in the judgment of the Secretary of War, to take possession of material found on bars and islands within the river banks, or other material lying adjacent or near to the line of any of said works and needful for their prosecution or maintenance, the officers in charge of said works may, when they cannot agree as to the price with the owners thereof, in the name of the United States take possession of and use the same after first having paid or secured to be paid the value thereof, which may have been ascertained in the mode provided by the laws of the State wherein such property or material lies: *Provided, however,* That when the owner of such property or material shall fix a price for the same which in the opinion of said officer in charge, shall be reasonable, he may take the same at such price without further delay. The Department of Justice shall represent the interests of the United States in the legal proceedings under this act.

Proviso.

Des Moines
Rapids Canal,
St. Marys
Falls Canal,
and Louisville
and Portland
Canal; Secre-
tary of War to
prescribe rules
and regula-
tions govern-
ing use, etc.,
of.

Vols. 25, p.
497; 26, p. 445;
28, p. 362; 32,
p. 374. *Post*,
pp. 533, 585,
711, 1009.

SEC. 7 That it shall be the duty of the Secretary of War to prescribe such rules and regulations in respect to the use and administration of the Des Moines Rapids Canal [^a], the Saint Mary's Falls Canal, and the Louisville and Portland Canal [^b], as in his judgment the public necessity may require; which rules and regulations shall be posted in some conspicuous place for the information of the public. Any person knowingly and wilfully violating such rules and regulations shall be liable to fine not exceeding five hundred dollars, or imprisonment not exceeding six months; to be enforced in any district court in the United States within whose territorial jurisdiction such offense may have been committed.

^a Section 14 of the river and harbor act approved Sept. 19, 1890, makes the provisions of this section applicable also to the Des Moines Rapids Canal dry dock. Such regulations are now prescribed pursuant to the provisions of section 4 of the river and harbor act of Aug. 18, 1894, as amended by sections 6 and 11 of the river and harbor act approved June 13, 1902.

^b By act approved Sept. 26, 1888, the provisions of this section are made applicable also to the St. Clair Flats Canal, Mich.

SEC. 8 That whenever the Secretary of War shall have good reason to believe that any railroad or other bridge now or hereafter to be constructed over any of the navigable waters of the United States, under authority of the United States or of any State or Territory, is an obstruction to the free navigation of such waters, by reason of difficulty in passing the draw-opening or the raft-span of said bridge, by rafts, steamboats, or other water-craft, it shall be the duty of the said Secretary, on satisfactory proof thereof, to require the company or persons owning, controlling, or operating said bridge to cause such aids to the passage of said draw-opening or of said raft-span, or of both said draw-opening and raft-span to be constructed, placed, and maintained, at their own cost and expense, in the form of booms, dikes, piers, or other suitable and proper structures for the guiding of said rafts, steamboats, and other water-craft safely through said opening or span, or both said opening or span, as shall be specified in his order in that behalf; and on failure of the company or persons aforesaid to make and establish such additional structures within a reasonable time, the said Secretary shall proceed to cause the same to be built or made at the expense of the United States, and shall refer the matter without delay to the Attorney-General of the United States, whose duty it shall be to institute, in the name of the United States, proceedings in any circuit or district court of the United States in which such bridge, or any part thereof, is located, for the recovery of the cost thereof; and all moneys accruing from such proceedings shall be covered into the Treasury of the United States: *Provided*, That no greater sum than fifteen thousand dollars shall be required to be expended upon any one bridge in a single year: *Provided further*, That such sum of money as may be necessary to execute the provisions of this act is hereby appropriated, out of any money in the Treasury of the United States not otherwise appropriated, to be paid on the requisition of the Secretary of War [^a].

Bridges over navigable rivers of United States obstructing navigation; companies owning to construct and maintain booms, dikes, and other aids to free navigation. Vol. 25, pp. 424, 425. *Post*, p. 517. Vol. 26, p. 453. *Post*, p. 580. Vol. 30, pp. 1153, 1154. *Post*, p. 890.

Failure to construct, maintain, etc., penalty.

Provido.

Appropriation.

Examinations and surveys—

SEC. 9 That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys or both, and estimates of cost of improvements proper to be made, at the following points, namely:

ALABAMA.

Alabama.

Mobile River and Harbor, from lower anchorage up to the northern limits of the city of Mobile, with a view to securing twenty-three feet depth of water.

^a This section is amended by the river and harbor acts of Aug. 11, 1888 (secs. 9 and 10), Sept. 19, 1890 (secs. 4 and 5), and Mar. 3, 1899 (sec. 18).

Arkansas.

ARKANSAS.

Little Red River.
 Red River, above Fulton.
 Petit Jean River.
 Bayou Bartholomew, from present head of navigation
 to Lincoln County line.

California.

CALIFORNIA.

Islas [Islais] Creek, off San Francisco Bay.
 Yuba River.
 San Mateo River.
 Napa River, from the mouth thereof to Napa City.

Connecticut.

CONNECTICUT.

Breakwater at Falkner's Island.
 River and harbor at Niantic.

Delaware.
 Maryland.
 Virginia.

DELAWARE, MARYLAND, AND VIRGINIA.

Lewes Creek and Rehoboth Bay, Delaware, Assateague
 [Assateague] and Chincoteague [Chincoteague] Bays,
 Maryland, with a view to form continuous inland naviga-
 tion from Chincoteague [Chincoteague] Bay, in Virginia
 to Delaware Bay, at or near Lewes, Delaware.

Florida.

FLORIDA.

Outer and inner bar at the entrance of Pensacola Har-
 bor;
 Anclote Harbor;
 Clearwater Harbor.
 Wekeiva River.
 Saint Augustine Harbor.
 Mosquito Inlet.
 Amelia and Wacissa rivers.
 Homosassa Bay.
 For canal and inland communication from the St.
 John's River through Mosquito Lagoon and Indian
 River to Jupiter Inlet and Lake Worth, Florida.
 Charlotte Harbor, Florida.

Georgia.

GEORGIA.

Darien Harbor and the Altmaha [*sic*] River, from
 Darien to its mouth.
 Upper Oconee River, from Skull Shoals to the Georgia
 Railroad Bridge.

Illinois.

ILLINOIS.

Calumet River, from a point half a mile east of Ham-
 mond to the forks of the river. Also to make survey of
 proposed ship-canal from Calumet River to Lake Calu-
 met.

Sny Island Levee on the Mississippi River; and the Secretary of War shall report what benefit, if any, this levee has been to the improvement of the channel and navigation of the river, and he shall submit an estimate of the probable cost of strengthening and preserving said levee so as to assure and maintain that benefit.

Shawneetown Harbor and Levee.

Removal of the bar and obstructions at and near the mouth of Whipple Creek, in Quincy Bay.

IOWA.

Iowa.

From Guttenberg north for the ascertainment of needed improvements and in securing a direct channel pointing to Guttenberg and by way of that channel south, and the protection of improvements already made at that locality.

INDIANA.

Indiana.

Lawrenceburg Harbor.

Kankakee River.

New Albany Harbor and the river and shores adjacent to said harbor.

Wolf Lake.

Wabash River, from Logansport to Delphi.

KENTUCKY.

Kentucky.

For examination and survey of the bar in the Ohio River opposite the mouth of the Licking River, to determine the cost and practicability of removing or making a navigable channel through the same; and the engineer in charge shall report whether it is practicable to connect the navigation of the Licking River with the Ohio River without the removal of the said bar or making a channel through the same.

The Secretary of War is hereby directed to report to Congress at its next session, or sooner if practicable, the condition of Green and Barren Rivers, and the Cumberland River above the mouth of the Jellico, in Kentucky, and the provisions and estimate of cost necessary to relieve the same from incumbrance, with a view to such legislation as will render the same free to commerce at the earliest practicable period.

Harbor at Paducah.

Harbor at Owensboro'.

Little River.

Rough River.

LOUISIANA.

Louisiana.

Bayou Plaquemine.

Atchafalaya River, above Berwick Bay.

Outlets of Boeuf River, with view to closing same.

Bayou Carlin.

Natalbany River.

Maine.

MAINE.

Saco River.
York Harbor.
Wood Island Harbor.
Southern entrance to Owl's Head Harbor.

Maryland.

MARYLAND.

Tuckahoe Creek.
Skipton Creek.
Sassafras River, above Georgetown.
Harbor at Easton Point, commencing at a point on Third Haven [Tred Avon] River where the Government work on the channel of said river was recently suspended.
Pocomoke River and Sound.

Massachusetts.

MASSACHUSETTS.

Harbor at Gloucester, with a view to the removal of rock obstructions.
Fort Point Channel [Boston Harbor].
Powow River.
Harbor at Salem, with a view to building a jetty running out from the mainland to deep water.
Harbor at Marblehead, for repair of sea-wall.
Harbor at Hingham.
Harbor at Hyannis, with a view of deepening the harbor.
A channel from Goose Point, in Plymouth Harbor, to the wharf of the Cordage Company.

Michigan.

MICHIGAN.

The State of Michigan having tendered to the United States the balance of tolls received by the State before the surrender of the Saint Mary's Falls Ship-Canal, to aid in constructing a dry-dock at the canal, such balance being about sixty thousand dollars, the Secretary of War is directed to cause plans, estimates, and specifications for such dry-dock, above the locks, and also to report whether the old locks can be used for a dry-dock, and the cost of fitting the same for that purpose.

Lac La Belle Harbor.

Mackinac Harbor; and report whether Mackinac Harbor or Mackinac Island Harbor should be improved.

Little Traverse Bay, near the village of Petoskey; with a view to constructing a harbor of refuge.

Pine River, St. Clair County.

Clinton River.

Saint Clair River: Examination and survey of the right bank from Lake Huron to Lake Saint Clair, to ascertain whether the erosion and wearing away of said bank is injuring the navigation of Saint Clair River and Saint Clair Flats Canal by shoaling the channel and obstructing

navigation therein, and to report estimates of expense for preventing such injury.

For a further and more complete survey for a break-water at or near Cross Village, in Michigan, in the west part of the Straits of Mackinac, with a view of making a harbor of refuge at Cross Village, Michigan.

MINNESOTA.

Minnesota.

Agate and Burlington Bay.

Minnesota, and Minnesota and Wisconsin, Saint Louis Bay, and Saint Louis River, from Connor's Point, Wisconsin, and Rice's Point, Minnesota, to foot of first falls.

Big Stone Lake, and Lake Traverse, with a view to connecting them.

MISSISSIPPI.

Mississippi.

Bayou Pierre.

Deer Creek.

Pascagoula River, from the mills at Moss Point down to the anchorage in the bay, with a view to securing a uniform depth of twelve feet of water.

Back Bay at Handsboro' [^a].

Homochitto and Buffalo Rivers.

Cassidy's Bayou.

MISSOURI.

Missouri.

Yazoo Pass [^b], to determine the cost of a lock at that place.

Osage River, from mouth to Linn Creek, with a view to movable locks and dams.

Nish-na-botna River, with a view to increasing the depth of channel in the Missouri River.

NEW HAMPSHIRE.

New Hampshire.

Harbor at Portsmouth, from the sea to the wharf.

Little Harbor at Portsmouth, with a view to its improvement as a harbor of refuge.

Winnepesaukee [Winnepesaukee] Lake, at a point called "The Weirs."

NEW JERSEY.

New Jersey.

Hudson River, on the New Jersey side, from Weehawken to Bergen Point, Hudson County, New Jersey, with a view to deepening the water at the wharf on that side.

Corson's Sound and Townsend Inlet.

Mouth of Salem River.

Harbor of Atlantic City at Absecon Inlet.

^a Handsboro is situated on Bayou Bernard, about 2½ miles from its mouth. The bayou empties into Back Bay.

^b For description of this pass see footnote on page 389.

New York.

NEW YORK.

Huntington Harbor.
 Horton's Point, near Dutch Pond Point, for break-water.
 Salmon River [^a], at and below Fort Covington.
 Whitehall Harbor.
 Lake Champlain, at Four Channels.
 Hudson River, from Troy to mouth of canal.
 Scajaquada Creek at Buffalo.
 Baldwin River, at Baldwin Station, to connect with Long Beach.
 Mouth of the Saranac River, at Plattsburgh.
 Niagara River, from Youngstown to Lake Ontario.
 Mouth of Salmon River [^b], and the inner natural harbor thereat, on Lake Ontario, New York, with a view of making a harbor of refuge for vessels in distress and for purposes of commerce and navigation.

North Carolina.

NORTH CAROLINA.

Black River.
 Pasquotank River, above mouth of canal.
 Perquimons River, above Hartfort [*sic*].
 Green River.
 Cashie River, from its mouth to the town of Windsor, in Bertie County.
 Bouge [Bogue] Sound, between New River and Beaufort.
 Northeast branch of Cape Fear River, resurvey.

Ohio.

OHIO.

Scioto River.
 Muskingum River.
 At Cleveland, Ohio, on the opening and improving of the channel known as the old "river bed" of the Cuyahoga River.

Oregon.

OREGON.

Bar at the mouth of the entrance to Nehalem Bay and River.

Pennsylvania.

PENNSYLVANIA.

West Branch of the Susquehanna River, between Salt Lick and Buttermilk Falls.

Rhode Island.

RHODE ISLAND.

Pawcatuck River.
 Warren River, with a view to the removal of obstructions from the channel.

^a A tributary of St. Lawrence River.

^b Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

SOUTH CAROLINA.

South Carolina.

North Fork of the Edisto River, in the counties of Orangeburg and Lexington.

Congaree River.

Entrance to Winyaw Bay, near Georgetown.

TENNESSEE.

Tennessee.

Elk River, Tennessee and Alabama.

Holston River.

Extension of the survey of Caney Fork River to Frank's Ferry.

TEXAS.

Texas.

Cypress Bayou: The Secretary of War is hereby directed to cause a resurvey of the work of improvement of the navigation of Cypress Bayou and the lakes between Jefferson, in Texas, and Shreveport, in Louisiana, in order to ascertain if the necessary improvement cannot be made upon some other plan than building a dam across the Albany Flats, as recommended by the engineer; and for this purpose he is hereby authorized and directed to expend so much of the unexpended balance of appropriations to the credit of said work as may be necessary.

VERMONT.

Vermont.

Maquam Bay, Swanton.

VIRGINIA.

Virginia.

Cockpit Point [Potomac River], for ice-harbor.

Colonial Beach [Potomac River], formerly White Point, in county of Westmoreland.

WEST VIRGINIA.

West Virginia.

Green Brier River.

WISCONSIN.

Wisconsin.

Ashland Harbor, in Ashland Bay, Lake Superior.

IDAHO TERRITORY.

Idaho.

Cœur d'Alene Lake and River.

Saint Joseph's River.

Snake River, between Lewiston and mouth of Boise River.

WASHINGTON TERRITORY.

Washington Territory.

Olympia Harbor.

Puyallup River.

Willapah River.

Lewis River.

Columbia River, above mouth of Snake River.

Appropriation for examinations, surveys, etc., not otherwise provided for.

Proviso.

Preliminary examinations, reports of, to be made to Congress; printing.

For examinations, surveys, and contingencies, and for incidental repairs, for which there is no special appropriation, for rivers and harbors, one hundred and twenty-five thousand dollars: *Provided*, That no survey shall be made of any harbors or rivers until the Chief of Engineers shall have directed a preliminary examination of the same by the local engineer in charge of the district, or an engineer detailed for the purpose; and such local or detailed engineer shall report to said Chief of Engineers whether, in his opinion, said harbor or river is worthy of improvement, and shall state in such report fully and particularly the facts and reasons on which he bases such opinion, including the present and prospective demands of commerce. And it shall be the duty of the Chief of Engineers to direct the making of such survey if, in his opinion, the harbor or river proposed to be surveyed be worthy of improvement by the General Government; and he shall report to the Secretary of War the facts, and what public necessity or convenience may be subserved thereby, together with the full reports of the local engineer. Said reports of preliminary examinations and surveys shall be made to the House of Representatives, and are hereby ordered to be printed when so made.

Appropriations immediately available.

SEC. 10. That all moneys hereby appropriated shall be immediately available.

Approved, July 5, 1884.

July 5, 1884.
Vol. 23, p. 164.

CHAP. 231.—An Act Granting the consent of Congress to the Saint Cloud Water Power and Mill Company to construct a dam across the Mississippi River at Saint Cloud, Minnesota.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby granted to the Saint Cloud Water Power and Mill Company to construct across the Mississippi River, at some point within the incorporated limits of the city of Saint Cloud, a dam, canal, and works necessarily incident thereto, for water-power and other purposes, and in connection therewith a wagon and foot-bridge for public travel: *Provided*, That said dam shall be so constructed as not to interfere with the existing dam and mill at Sauk Rapids, and so that the Government of the United States can at any time construct in connection therewith a suitable lock for navigation purposes: *Provided also*, That the Government of the United States may at any time take possession of said dam, and control the same for purposes of navigation, by paying said company the actual cost of the same, but shall not do so to the destruction of the water-power

Construction of dam, etc., across Mississippi River, St. Cloud, Minn., authorized.

Wagon and foot bridge.

Proviso.

Not to interfere with dam and mill at Sauk Rapids.

Proviso.
Rights of Government of United States reserved.

created by said dam: *Provided further*, That the works be constructed so as to provide for the free passage of saw-logs and rafts, and, when necessary, to permit the passage of boats; and, further, that such changes or modifications in the works as the Secretary of War may from time to time deem necessary in the interest of navigation shall be made, at the expense of the water-power company: *Provided further*, That in case of any litigation arising from the obstruction of the channel by the dam, canal, or bridge, the cause may be tried in the district court of the United States in which the works are situated.

Proviso.
Free passage
of saw logs,
rafts, etc.

Proviso.

SEC. 2. That the right to amend, alter, or repeal this act is hereby expressly reserved.

Approved, July 5, 1884.

CHAP. 332.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-five, and for other purposes.

July 7, 1884.
Vol. 23, p. 194.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and eighty-five, namely:

Appropriations.
Sundry civil expenses.

* * * * *

For the Mississippi River Commission, as follows:

For salaries and traveling expenses of the Mississippi River Commission, and for salaries and traveling expenses of assistant engineers under them, and for office expenses and contingencies, seventy-five thousand dollars.

Mississippi
River Commission.

* * * * *

To reimburse and pay the Hartford and New York Transportation Company for labor and money expended in removing obstructions and dredging and improving the bars and piers in the Connecticut River, below Hartford, in eighteen hundred and eighty-two and eighteen hundred and eighty-three, under the advice and by the recommendation of the United States engineer officer in charge, six thousand four hundred and seventy-nine dollars and thirty-two cents.

Hartford and
New York
Transportation Co.; pay-
ment to.
Reappropriated.
Vol. 23, p. 496.
Post, p. 427.

To reimburse and pay the Hartford and New York Transportation Company for money expended in maintaining a temporary light on the breakwater at the mouth of the Connecticut River from February first, eighteen hundred and seventy-nine, to February first, eighteen hundred and eighty-four, while the work was in progress, and under an arrangement with the United States engineer officers in charge of the work, the same to be paid from the unexpended appropriation for the erection of a Government light there, made in eighteen hundred

and eighty-two, and to be immediately available, two thousand one hundred and twenty-four dollars.

* * * * *

Approved, July 7, 1884.

Dec. 20, 1884. **CHAP. 4.**—An Act Granting the right of way to the city of
Vol. 23, p. 280. Newport, Rhode Island, over the breakwater at Goat Island.

Right of way
granted to city
of Newport,
R. I., across
breakwater at
Goat Island
for drainage.
Proviso.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the city of Newport, Rhode Island, is hereby granted the right to construct and maintain a sewer for drainage purposes through or across the breakwater at Goat Island, subject to such conditions as the Secretary of War may prescribe: *Provided*, That such conditions shall be accepted by the city of Newport before the work herein authorized shall be commenced.

Approved, December 20, 1884.

Mar. 3, 1885. **CHAP. 359.**—An Act Making appropriations to supply defi-
Vol. 23, p. 446. ciencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-five, and for prior years, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, * * *

* * * * *

Attorney-
General United
States to in-
vestigate judg-
ments, e. c. ,
against United
States, arising
under act ap-
proved 1875,
v. 18, c. 166,
p. 506, and re-
port to Con-
gress.

The Attorney General of the United States is required to investigate the judgments and awards against the United States arising under an act of Congress entitled “an act to aid in the improvement of the Fox and Wisconsin Rivers in the State of Wisconsin” approved March third, eighteen hundred and seventy-five, and to report to Congress at its next session whether the liability of the United States therefor is established and what amount is justly due thereon.

* * * * *

Approved, March 3, 1885.

Mar. 3, 1885. **CHAP. 360.**—An Act Making appropriations for sundry civil
Vol. 23, p. 478. expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-six, and for other purposes.

Appropriations for sundry civil expenses for year ending June 30, 1886.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and eighty-six, namely:

* * * * *

That the Secretary of the Treasury is hereby authorized to issue a warrant in favor of the Hartford and New York Transportation Company for the sum of six thousand four hundred and seventy-nine dollars and thirty-two cents [a], which sum is hereby reappropriated, being the amount appropriated for said Hartford and New York Transportation Company under the act approved July seventh, eighteen hundred and eighty-four, making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-five, and for other purposes, and now unpaid.

Hartford and
New York
Transportation
Co., payment
to,
Reappropria-
tion.
Vol. 23, p.
224.
Ante, p. 425.

* * * * *

Approved, March 3, 1885.

CHAP. 49.—An Act To authorize the Mississippi Water-Power and Boom Company, of Brainerd [Brainerd], Minnesota, to construct a dam across the Mississippi River.

Apr. 15, 1886.
Vol. 24, p. 12.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of the Government is hereby given to the Mississippi Water-Power and Boom Company of Brainerd, Minnesota, to construct across the Mississippi River, at some point not more than two miles from the limits of said city of Brainerd, to be approved by the Secretary of War, a dam, canal and the appurtenances thereof, for water-power and other purposes, and in connection therewith a wagon and foot bridge for public travel: *Provided*, That the Government of United States may at any time construct in connection therewith a suitable lock for navigation purposes: *Provided also*, That the Government of the United States may at any time take possession of said dam and control the same for purposes of navigation, by paying said company the actual cost of the same, but shall not do so to the destruction of the water-power created by said dam: *Provided further*, That the Secretary of War may at any time require and enforce, at the expense of the owners, such modification and changes in the construction of said dam as he may deem advisable in the interests of navigation; and that said dam shall, if necessary, be so built that boats and rafts may pass through the same, without the imposition of any toll or charge: *And provided further*, That all suits relative to any obstruction of navigation arising from said dam may be tried in the United States circuit and district courts for Minnesota.

Dam across
Mississippi
River may be
built by Missis-
sippi Water-
Power and
Boom Co., of
Brainerd, Minn.
Canal and
bridge.

Provisos.

Lock.
Government
may take pos-
session.

Navigation.

Litigation.

SEC. 2. That the right to alter, amend, or repeal this act is hereby expressly reserved without any claim of any

Right to
amend, etc.,
reserved.

^a For labor and money expended in removing obstructions and dredging and improving the bars and piers in Connecticut River below Hartford, Conn.

kind arising in favor of any party in consequence of such amendment or repeal.

Approved, April 15, 1886.

May 1, 1886.
Vol. 24, p. 17.

CHAP. 70.—An Act Authorizing the partition of certain land in Louisville, Kentucky, belonging jointly to John Echols and the Government of the United States.

Partition of
land owned by
John Echols
and the United
States, in Louis-
ville, Ky.
Preamble.

Whereas a tract of ground situated in Louisville, Kentucky, adjoining the Louisville and Portland Canal, and known as "Rowan's Basin," is owned by the United States of America and by John Echols in the following proportion and under the following conveyances; to wit: The United States, as the proprietor of the Louisville and Portland Canal and the owner of all the stock of the Louisville and Portland Canal Company, owns an undivided three-eighths of said real estate, by virtue of the following deeds: One from R. H. Campbell and others to the Louisville and Portland Canal Company, recorded in deed-book numbered one hundred and thirty-five, page four hundred and twenty-three, and one from George H. Douglas to said canal company, recorded in deed-book numbered one hundred and thirty-seven, page four hundred and two, both in the Jefferson County, Kentucky, clerk's office; and said John Echols owns an undivided five-eighths of said real estate, under and by virtue of the following deeds to him, to wit: One from Eliza H. Boone and others, recorded in deed-book numbered two hundred and fifty-five, page one hundred and thirty-four; one from Rebecca B. Rowan, trustee, and others, recorded in deed-book numbered two hundred and fifty-four, page three hundred and eighty-two; one from Rowan Buchanan and others, recorded in deed-book numbered two hundred and fifty-four, page three hundred and sixty-two; and one from Samuel J. Broadwell and others, recorded in deed-book numbered two hundred and fifty-four, page six hundred and two, all in the Jefferson County, Kentucky, clerk's office; and it is to the interest of both parties that partition shall be made of said real estate: Therefore,

Secretary of
War to agree
with Echols as
to partition.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War of the United States is hereby authorized and empowered to agree with said Echols, his heirs or his assigns, upon such partition of said real estate as may seem to the Secretary of War to be just and proper, and may, in the name of and on behalf of the United States of America, make, execute, and deliver to said Echols, his heirs or his assigns, and receive from him or them, such deed of conveyance as may effectuate the partition herein provided for.

SEC. 2. That this act shall take effect from its passage.

Approved, May 1, 1886.

CHAP. 71.—An Act Granting the right of way to the Schuylkill River East Side Railroad Company through the arsenal and naval asylum grounds at Philadelphia, Pennsylvania.

May 1, 1886.
Vol. 24, p. 17.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Schuylkill River East Side Railroad Company is hereby authorized to construct its railroad across the grounds of the United States forming a part of the grounds of the naval asylum and of the arsenal at Philadelphia, in the State of Pennsylvania; * * * *And provided further,* That in the construction of said road through said grounds the said company shall be required to construct thereon a bulkhead upon the bulkhead line on the Schuylkill River, as fixed by the port-wardens of the city of Philadelphia.

Right of way granted to Schuylkill River East Side R. R. Co. across arsenal and naval asylum grounds, Philadelphia, Pa.

Bulkhead.

* * * * *

Approved, May 1, 1886.

CHAP. 377.—An Act Making appropriation to supply deficiency in amount required for expenditure to June thirtieth, eighteen hundred and eighty-six, for examination and surveys required by acts of March third, eighteen hundred and seventy-five, and June nineteenth, eighteen hundred and seventy-eight, to ascertain depth of water and width of channel at South Pass of Mississippi River.

May 26, 1886.
Vol. 24, p. 70.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sum be, and the same is hereby, appropriated out of any money in the Treasury not otherwise appropriated, to wit: To supply deficiency in amount required for expenditure to June thirtieth, eighteen hundred and eighty-six, for examinations and surveys required by the acts of March third, eighteen hundred and seventy-five, and June nineteenth, eighteen hundred and seventy-eight, to ascertain the depth of water and width of channel secured and maintained from time to time by James B. Eads at South Pass of the Mississippi River, and to enable the Secretary of War to report to Congress during the maintenance of the work, six thousand four hundred and ninety-two dollars.

South Pass, Mississippi River.

Deficiency appropriation for examination and surveys to ascertain depth of water and width of channel.

Vol. 18, p. 463.
Vol. 20, p. 168.

SEC. 2. That the money hereby appropriated shall be immediately available.

Appropriation immediately available.

Approved, May 26, 1886.

CHAP. 623.—An Act To authorize the improvement of the water-power of the Mississippi River at Little Falls, Minnesota.

July 3, 1886.
Vol. 24, p. 123.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be lawful for the Little Falls Water-

Little Falls
Water-Power
Co., may build
dam, etc., at
Little Falls,
Mississippi
River, Minn.

Provisos.

Sluiceway,
etc., for pas-
sage of logs, etc.

Changes.

Power Company of Minnesota to improve and develop the water-power in the Mississippi River at Little Falls, in the State of Minnesota, by constructing, maintaining, and operating in said river, at said Little Falls, dams, piers, sluice ways, canals, locks, ponds, breakwaters, abutments, and mill sites for manufacturing purposes: *Provided*, That there shall be placed and maintained in connection with said dam and other works a sluice-way, lock, or other fixture sufficient and so arranged as to permit logs, timber, and lumber to pass around, through, or over said dam or other works without unreasonable delay or hindrance, and without tolls or charges: *Provided further*, That the Secretary of War may at any time require such changes and alterations to be made in said works, at the expense of said water-power company, as he may deem advisable and necessary in the interest of navigation.

SEC. 2. That the right to alter, amend, or repeal this act is hereby expressly reserved.

Approved, July 3, 1886.

Aug. 2, 1886.

Vol. 24, p. 214.

CAHP. 843.—An Act To authorize the Secretary of War to permit the Carrollton and Lock Number One Turnpike Road Company to locate and construct its road on land belonging to the United States at Lock Number One, on the Kentucky River, in the State of Kentucky.

Right of way
to Carrollton
and Lock No. 1
Turnpike Road
Co. through
United States
land at Lock
No. 1, Ken-
tucky River,
Ky.

Proviso.
Location.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be, and is hereby, authorized and empowered to permit the Carrollton and Lock Number One Turnpike Road Company to locate and construct its road through the land belonging to the United States at Lock Number One, on the Kentucky River, in the State of Kentucky, upon such terms and conditions as he may consider proper: *Provided*, That said road shall not be so located or constructed as to obstruct the use of the said land by the United States for public purposes.

Approved, August 2, 1886.

Aug. 4, 1886.

Vol. 24, p. 256.

CHAP. 903.—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-six, and for prior years, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, to supply deficiencies in the

appropriations for the fiscal year eighteen hundred and eighty-six, and for other objects hereinafter stated, namely:

* * * * *

For payment [^a] of judgments and awards recovered against the United States reported by the Attorney-General under the provisions of chapter three hundred and fifty-nine of the laws of eighteen hundred and eighty-five, approved March third, eighteen hundred and eighty-five, Executive Document (first session Forty-ninth Congress) number two hundred and seven, as follows: To pay Augustus G. Ruggles amount of judgment recovered by him against the United States for damages and costs, twenty-two thousand two hundred and eighty-seven dollars and six cents [^b]; to pay James K. Pumpelly, Edwin C. Gray, and Frank L. Jones, as administrator of the estate of George J. Pumpelly, deceased, amount of judgment recovered by them against the United States, December thirteenth, eighteen hundred and seventy-six, ten thousand one hundred and sixty-four dollars and fifty-seven cents; to pay John S. McDonald amount awarded him against the United States, November thirteenth, eighteen hundred and seventy-five, for flowage of lands by reason of Government dams at Menasha, Wisconsin, seventeen thousand five hundred and eighty-seven dollars and seventy-three cents; to pay Peter Armond amount awarded him against the United States, November thirteenth, eighteen hundred and seventy-five, for flowage of lands by reason of Government dams at Menasha, Wisconsin, two hundred and sixty-eight dollars and eighty cents; to pay Fisher Jewson amount awarded him against the United States, November thirteenth, eighteen hundred and seventy-five, for flowage of lands by reason of Government dams at Menasha, Wisconsin, three hundred and eighty-four dollars; to pay Richard Jewson and Richard Jewson, junior, amount awarded therein against the United States, November thirteenth, eighteen hundred and seventy-five, for flowage of lands by reason of Government dams at Menasha, Wisconsin, six hundred and fourteen dollars; to pay J. D. Bud amount awarded him against the United States, October fourteenth, eighteen hundred and seventy-five, for flowage of lands by reason of Government dams at Menasha, Wisconsin, four hundred and fifty dollars.

For payment of unappealed awards and judgments rendered against the United States for flowage damages

Payment of judgments, etc., on account of improvement of Fox and Wisconsin rivers.

Vol. 23, p. 451.

Ante, p. 426.

Vol. 25, p. 22.

Post, p. 477.

^a The total payments of judgments and interest under the terms of this act, on account of damages resulting from the improvement of Fox and Wisconsin rivers, amounted to \$129,403.10, this sum satisfying all the claims thus enumerated.

^b The deficiency act approved February 1, 1888, amends this appropriation so as to make it read \$20,287.06. The total amount paid to Augustus G. Ruggles under these acts was \$21,612.48, including interest.

caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, as follows: William H. Jenkyns, nine hundred and sixty dollars; Charles Miller, four hundred dollars; George H. Mansur, seven hundred and seventy-two dollars and fifty cents; Edley Payne, one thousand one hundred dollars; Peter Grattan, seven hundred and five dollars; John N. Kid, nine hundred dollars; Kate Jenkyns, two hundred dollars; William Clements, three hundred and ten dollars; Frank Walker, four hundred and fifty-five dollars and fifty cents; L. H. Eaton, six hundred and eighty-seven dollars and fifty cents; Tilly Walker, five hundred dollars; Tertullius Spaulding, nine hundred and ten dollars; E. P. and William Sill, four hundred and thirty dollars; William Sill, seven hundred and sixty dollars; Amos D. Page, seven hundred and sixty dollars; Patrick Hussey, thirty dollars; Joseph Strobe, nine hundred and sixty dollars; R. J. Radick, one hundred and thirty-five dollars; Samuel Neff, four hundred and fifty-five dollars; Patrick Morrissey, executor of the last will and testament of Patrick Hayes, deceased, two hundred and sixty-five dollars; J. A. Sanford, two hundred and fifty dollars; George Allanson, one hundred and twenty-five dollars; Michael Clarey, two hundred and thirty dollars; Helen B. Chapman, nine hundred and forty dollars; Andrew Frederickson, nine hundred and five dollars; J. H. Porter, one thousand one hundred and eighty-five dollars; Gustave Ehrlich, one hundred and thirty-five dollars; Dennis Cushing, three hundred and seventy dollars; John Cushing, five hundred dollars; James Durick, one hundred dollars; William Cushing, two hundred and ninety dollars; William Geary, two hundred and eighty dollars; Oliver Dempsey, two hundred dollars; Catherine Cavanaugh, three hundred dollars; James Durick, four hundred and twenty dollars; John F. Seymour, two hundred dollars; W. M. Sinclair, one hundred dollars; costs on appeal to superior court, one hundred and fourteen dollars and sixty-five cents; M. Aukland, eighty dollars; Aaron Walker, two hundred dollars; Jane J. Thomas, administratrix of the estate of Thomas J. Thomas, two hundred dollars; August Frohne, one hundred and fifty dollars; W. R. and J. M. Edwards, one hundred dollars; Henry Floyd, one hundred and forty dollars; Martha Hanson, eighty dollars; Robert Edwards, two hundred dollars; F. Chamberlain, fifteen dollars; Cornelius Spoor, thirty dollars and twelve cents; Wesley Horton, twenty-eight dollars and ten cents; Frederick Bandt, one hundred and forty-five dollars; William Page, one hundred and fifty dollars; August Zulk, one hundred dollars; Anton Rumppler and August Zelmer, thirty-seven dollars and fifty cents; Martin Matz, three hundred dollars; John Karon, one hundred and thirty dollars; Martin Tinde, seventy-five dollars; Julius Liebig, one hundred and sixty dollars; Louis Kranz, seventy-five dollars; Herman Esmer, fifty

dollars; August Swanke, two hundred dollars; John Hursley, Fred Radtkin, and Martin Radkie, one hundred dollars; William Spooner, one hundred dollars; Franz Zuilki, one hundred dollars; Juliana Countryman, two hundred dollars; Joseph Guderski, twenty dollars; Frederick Boick, one hundred and eighty dollars; William Fuchs, seventy-five dollars; John O. Borst, one hundred and seventy-five dollars; S. A. Hake, twenty-five dollars; Ephraim Mueller, two hundred and fifty dollars; August Behm, one hundred and twenty-five dollars; G. H. Behm, sixty-five dollars; Caroline Fuller, sixty-five dollars; Earnest Lambrecht, one hundred dollars; John Larson, two hundred and twenty-five dollars; Christian Temple, two hundred and thirty-three dollars; S. Y. Judd, five hundred dollars; Elizabeth Owens, three hundred dollars; Henry Tolby and Ferdinand Retz, appealed, two hundred and fifty dollars; John Jones, three hundred and fifty dollars; John Michaels, one hundred and twenty-four dollars; D. S. Kissam, four hundred and fifty dollars; Julia Hopp, one hundred dollars; Adam McKittrick, four hundred dollars; James Lynch, three hundred dollars; Earnest Liebenhauer, three hundred dollars; John B. Wyso, one hundred dollars; William McClelland, fifty dollars; William Zanto, two hundred dollars; Michael Glynn, seventy-five dollars; Hollis Stedman, fifty dollars; J. J. Keen, one hundred dollars; Datis E. Lewis, one hundred and twenty-five dollars; Alonzo D. Payne, two hundred dollars; Francis L. Smith, Erastus H. Payne, and Horace D. Smith, two hundred and sixty dollars; Amos C. Brown and Lucy Brown, one hundred and seventy-five dollars; William Stewart, one hundred and twenty dollars; Joseph M. Hodgkins and Samuel C. Hall, twenty dollars; John McClelland, fifty dollars; Henry Falbe, or Phelps, fifty dollars; Tracy W. Lewis, seventy dollars; C. A. Peck, two hundred dollars; E. H. Payne and Sarah E. Rigley, eighty dollars; W. J. Middleton, one hundred and fifty dollars; Vincent S. Sawinski, fifty dollars; John Rude, eighty dollars; Hugh Lynch, fifty dollars; William Gordon, two hundred dollars; Thomas J. Dewey, one hundred and fifty dollars; Amanda A. Bugh, one hundred and fifty dollars; Henry Basing, one hundred dollars; Ferdinand Marion, one hundred and fifty dollars; N. M. Dodson, one hundred and fifty dollars and ninety cents; George Fitch and D. W. C. Palmetter, seventy-five dollars; Mrs. T. W. Marsh, seventy-five dollars; Gustave Raasch, sixty dollars; W. J. Frank, one hundred and twenty-five dollars; Edward Teske and Gustave Teske, one hundred and seventy-five dollars; De Los Maxon, one hundred dollars; Joseph Melodzck, two hundred and five dollars; Lea Kenan, nine hundred and twelve dollars; Charles H. Kempley, five hundred and ninety-five dollars and twenty-five cents; Anna Eliza Page and Margaret Jane Page, six hundred dollars; John Roger, three hundred and thirty-

eight dollars and fifty cents; Edward McCaffery and Asiel Waldo, two hundred and sixty-three dollars and twenty cents; Abraham Seaman six hundred and forty-three dollars and fifty-four cents; Samuel Phoenix, three hundred and fourteen dollars and fifty cents; Harriet B. Cramer, fifty-three dollars and four cents; Isaac Pickering, one hundred and eighteen dollars and sixty-six cents; Jane Pickering, one hundred and seven dollars and twenty-seven cents; F. B. Hawes, four hundred and thirty dollars and thirty-five cents; Lyman R. Slade, one hundred and twenty-six dollars and ninety-nine cents; A. W. Whitson and T. Whitson, two hundred and ninety dollars and seventy cents; Charles Metcalf, four hundred and six dollars and thirteen cents; Elizabeth Morris, sixty-five dollars; Margaret Bohner, Theodore Bohner, and Frank Bohner, three hundred and ninety-two dollars and thirty cents; Spencer A. Pease, three hundred and seventy-five dollars; Henry W. Rockafellow, one hundred and forty-eight dollars and sixty cents; John and Richard Mee and F. A. Kendall, two hundred and forty-one dollars and sixty cents; C. C. Mathers, three hundred and thirty-two dollars and twenty-five cents; Eli McNutt, Hiram McNutt, and Angelina Waldo, nine hundred and two dollars and sixty-two cents; J. H. Merritt, four hundred and thirty-four dollars and twenty-five cents; William Hartwig, fifty dollars; John McNab, three hundred and thirty-four dollars and thirty-five cents; Mary A. Leach, one hundred and fifty dollars and forty cents; Robert Weir, six hundred and twenty-six dollars and seventy cents; Mathew Spain, fifty dollars; Wilhelmina Retz, seventy-five dollars; Andrew Kewitz, one hundred dollars; G. Liebenhauer, two hundred dollars; David Evans, five hundred dollars; Frederick Hault, two hundred and forty dollars; and a sufficient sum in addition thereto as may be necessary to pay the interest on the judgments and awards as above provided is hereby appropriated.

* * * * *

Payment of
claims certi-
fied. Supple-
mental.

Vol. 18, p.
110.
Ante, p. 225.
Vol. 23, p.
254.

SEC. 5. That for the payment of a portion of the following supplemental list of claims, which are fully set forth in House Executive Document numbered two hundred and ninety-four, Forty-ninth Congress, first session, and are certified to be due by the accounting officers of the Treasury under appropriations the balances of which have been exhausted or carried to the surplus fund under the provisions of section five of the act approved June twentieth, eighteen hundred and seventy-four, and under appropriations heretofore treated as permanent, being for the service of the fiscal year eighteen hundred and eighty-three and prior years, and which have been certified to Congress under section two of the act of July seventh, eighteen hundred and eighty-four, there is appropriated as follows:

* * * * *

WAR DEPARTMENT CLAIMS ALLOWED BY THE THIRD AUDITOR AND SECOND COMPTROLLER.

Claims allowed by Third Auditor and Second Comptroller, War Department.

*	*	*	*	*	
For improving Umpqua River, Oregon, one dollar and forty-seven cents.					Umpqua River, Oreg.
*	*	*	*	*	

Approved, August 4, 1886.

CHAP. 929.—An Act Making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes. Aug. 5, 1886.
Vol. 24, p. 310.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, and to be expended under the direction of the Secretary of War, for the construction, completion, repair, and preservation of the public works herein named:

River and harbor appropriations.
Harbors.

Improving harbor at Rockland, Maine: Continuing improvement, twenty-two thousand five hundred dollars. Rockland, Me.

Improving breakwater at the mouth of Saco River, Maine: Continuing improvement and repairs, twelve thousand five hundred dollars. Saco River, breakwater, Me.

Improving harbor at Portland, Maine: Continuing improvement, thirty thousand dollars. Portland, Me.

Improving the channel in Back Cove, Portland, Maine: Continuing improvement, twenty-six thousand two hundred and fifty dollars. Back Cove, channel, Me.

Improving harbor at York, Maine, fifteen thousand dollars. York, Me.

Improving harbor at Portsmouth, New Hampshire: Continuing improvement, fifteen thousand dollars. Portsmouth, N. H.

Improving the harbor of refuge at Little Harbor, New Hampshire: Continuing improvement, ten thousand dollars. Little Harbor, N. H.

Improving harbor at Burlington, Vermont: Continuing improvement, eighteen thousand seven hundred and fifty dollars. Burlington, Vt.

For a breakwater at Gordon's Landing, on Lake Champlain, to be built on the twelve foot curve mentioned in the papers accompanying the report of the Secretary of War to the Senate dated March first, eighteen hundred and eighty-six (Executive Document Number Eighty-one, Forty-ninth Congress, first session), eighteen thousand seven hundred and fifty dollars. Gordon's Landing, breakwater, Lake Champlain.

Improving harbor at Boston, Massachusetts: Continuing improvement, fifty-six thousand two hundred and fifty dollars; of which eighteen thousand seven hundred Boston, Mass.

and fifty dollars are to be expended at Fort Point Channel, on Part A, below Congress Street Bridge.

- Lynn, Mass. Improving harbor at Lynn, Massachusetts: Continuing improvement, six thousand dollars.
- Nantucket, Mass. Improving harbor at Nantucket, Massachusetts: Continuing improvement, fifteen thousand dollars.
- Hyannis Harbor, Mass. Improving Hyannis Harbor, Massachusetts, ten thousand dollars.
- Newburyport, Mass. Improving harbor at Newburyport, Massachusetts: Continuing improvement, thirty-seven thousand five hundred dollars.
- Wareham, Mass. Improving harbor at Wareham, Massachusetts: Continuing improvement, fifteen thousand dollars.
- Plymouth, Mass. Improving harbor at Plymouth, Massachusetts: Continuing improvement, six thousand dollars.
- Hingham, Mass. Improving harbor at Hingham, Massachusetts: Continuing improvement, six thousand dollars.
- Provincetown, Mass. Improving harbor at Provincetown, Massachusetts: Continuing improvement, three thousand dollars.
- Gloucester, Mass. Improving harbor at Gloucester, Massachusetts, five thousand dollars; of which two thousand dollars, or so much as may be needed for a survey, and remainder on Babson's Ledge.
- Sandy Bay, harbor of refuge. For the national harbor of refuge of the first class at Sandy Bay: Continuing improvement, one hundred thousand dollars.
- Scituate, Mass. Improving harbor at Scituate, Massachusetts: Continuing improvement, ten thousand dollars.
- Westport, Mass. Improving harbor at Westport, Massachusetts: Continuing improvement, one thousand dollars, for sand-fence.
- Woods Hole, Mass. Improving harbor at Wood's Holl, Massachusetts: Continuing improvement, fourteen thousand five hundred dollars.
- Block Island, R. I. Improving harbor at Block Island, Rhode Island: Continuing improvement, twenty thousand dollars; of which eight thousand dollars shall be expended on the breakwater and twelve thousand dollars on the inner harbor.
- Newport, R. I. Improving harbor at Newport, Rhode Island: Continuing improvement, fifteen thousand dollars.
- Bridgeport, Conn. Improving harbor at Bridgeport, Connecticut: Continuing improvement, twenty thousand dollars.
- Black Rock, Conn. Improving harbor at Black Rock, Connecticut: Continuing improvement, five thousand dollars.
- New Haven, Conn. Improving breakwater at New Haven, Connecticut: Continuing improvement, seventy-five thousand dollars.
- New Haven, Conn. Improving harbor at New Haven, Connecticut: Continuing improvement, twenty thousand dollars.
- New London, Conn. Improving harbor at New London, Connecticut: Continuing improvement, two thousand dollars.
- Norwalk, Conn. Improving harbor at Norwalk, Connecticut: Continuing improvement, three thousand dollars.
- Stonington, Conn. Improving harbor at Stonington, Connecticut: Continuing improvement, twenty thousand dollars.

- Improving harbor at Stamford, Connecticut: Continuing improvement, ten thousand dollars. Stamford, Conn.
- Improving harbor at Buffalo, New York: Continuing improvement, and repairs on the outer breakwater, one hundred and twelve thousand five hundred dollars. Buffalo, N. Y.
- Improving Buttermilk channel, New York: Continuing improvement, fifty-six thousand two hundred and fifty dollars. Buttermilk channel, N. Y.
- Improving breakwater at Rouse's Point, New York: Continuing improvement, twenty thousand dollars. Rouse Point, N. Y.
- Improving harbor at Dunkirk, New York: Continuing improvement, twenty thousand dollars. Dunkirk, N. Y.
- Improving harbor at Canarsie Bay, New York: Continuing improvement, ten thousand dollars. Canarsie Bay, N. Y.
- Improving harbor at Charlotte, New York: Continuing improvement and repairs, twenty-six thousand two hundred and fifty dollars. Charlotte, N. Y.
- Improving harbor at Flushing Bay, New York: Continuing improvement, ten thousand dollars. Flushing Bay, N. Y.
- Improving channel at Gowanus Bay, New York: Continuing improvement, seven thousand five hundred dollars. Gowanus Bay, N. Y.
- Improving harbor at Great Sodus Bay, New York: Continuing improvement, sixteen thousand eight hundred and seventy-five dollars. Great Sodus Bay, N. Y.
- Improving harbor at Greenport, New York: Continuing improvement, five thousand dollars. Greenport, N. Y.
- Improving harbor at Little Sodus Bay, New York: Continuing improvement, twelve thousand five hundred dollars. Little Sodus Bay, N. Y.
- Improving harbor at Oak Orchard, New York: Continuing improvement by repairs, twelve thousand five hundred dollars. Oak Orchard, N. Y.
- Improving harbor at Olcott, New York: Continuing improvement and repairs, ten thousand dollars. Olcott, N. Y.
- Improving harbor at Wilson, New York: Continuing improvement, ten thousand dollars. Wilson, N. Y.
- Improving harbor at Ogdensburg, New York: Continuing improvement, ten thousand dollars; which, together with the amount on hand, is to be used in removing obstructions from the mouth of the Oswegatchee and continuing the excavation at the lower harbor up stream. Ogdensburg, N. Y.
- Improving harbor at Oswego, New York: Continuing improvement, seventy-one thousand two hundred and fifty dollars; of which fifty-six thousand two hundred and fifty dollars to be used in repairs and fifteen thousand dollars in continuing work on the harbor. Oswego, N. Y.
- Improving harbor at Rondout, New York: Continuing improvement, two thousand five hundred dollars. Rondout, N. Y.
- Improving harbor at Saugerties, New York: Continuing improvements, fifteen thousand dollars. Saugerties, N. Y.
- Improving Harbor at Sheepshead Bay, New York: Continuing improvement, five thousand dollars. Sheepshead Bay, N. Y.

New York.

Improving New York Harbor, New York: To secure a thirty-foot channel at mean low water at Sandy Hook entrance of the harbor, upon such plan as the Secretary of War may approve, seven hundred and fifty thousand dollars.

Channel,
Staten Island
and New Jersey.

Improving channel between Staten Island and the New Jersey shore, New York and New Jersey: Continuing improvement, fifteen thousand dollars.

Raritan Bay,
N. J.

Improving harbor at Raritan Bay, New Jersey: Continuing improvement, thirty-seven thousand five hundred dollars.

Plattsburg,
N. Y.

Improving harbor at Plattsburg, New York: Continuing improvement, five thousand dollars.

Atlantic City,
survey for har-
bor of refuge.

For a more thorough and definite survey and examination of the harbor at Atlantic City, New Jersey, with a view to making a harbor of refuge at that point, five thousand dollars; said examination and survey to be made by a board consisting of three United States engineers.

Erie, Pa.

Improving harbor at Erie, Pennsylvania: Continuing improvement, and also for the improvement of said harbor as recommended by the Chief of Engineers, January thirteenth, eighteen hundred and eighty-five, thirty-seven thousand five hundred dollars: *Provided*, That the Secretary of War be, and he is hereby, authorized and directed to receive and accept for the United States, from the marine hospital of Erie, Pennsylvania, the title to the peninsula of Presque Isle, at Erie, Pennsylvania, as tendered by the said marine hospital, agreeably to the provisions of an act of the legislature of the State of Pennsylvania, approved May eleventh, eighteen hundred and seventy-one: *And provided further*, That twenty-two thousand five hundred dollars of said sum shall not be expended until the aforesaid title shall be accepted by the Secretary of War.

Proviso.
Title to Pres-
que Isle to be
accepted by
Secretary of
War.

Marcushook,
Pa., ice har-
bor.

Improving ice-harbor at Marcus Hook, Pennsylvania: Continuing improvement, fifteen thousand dollars.

Chester, Pa.,
cession of piers
to.

The Secretary of War is authorized to cede to the city of Chester, Pennsylvania, the upper and lower piers located in said city and extending into the Delaware River, and formerly used as an ice harbor.

Delaware
Breakwater.

Improving Delaware breakwater, Delaware: Continuing improvement, fifty-six thousand two hundred and fifty dollars.

Newcastle,
Del., ice har-
bor.

Improving ice-harbor at New Castle, Delaware: Continuing improvement, five thousand dollars.

Wilmington,
Del.

Improving harbor at Wilmington, Delaware: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

Baltimore,
Md.

Improving harbor at Baltimore, Maryland: Continuing improvement, one hundred and fifty thousand dollars.

Breton Bay,
Md.

Improving harbor at Breton Bay, Maryland: Continuing improvement, six thousand five hundred dollars.

Washington,
D. C., Potomac
River.

For continuing the improvement of the Potomac River in the vicinity of Washington, with reference to the

improvement of navigation, the establishment of harbor-lines, and the raising of the flats, under the direction of the Secretary of War and in accordance with existing plans, three hundred and seventy-five thousand dollars: *Provided*, That no part of the sum hereby appropriated shall be expended upon or with reference to any place in respect of which the title of the United States is in doubt, or in respect to which any claim adverse to the United States has been made.

Proviso.
Not to be expended where title is doubtful.

Improving harbor at Norfolk, Virginia, and improving approach to Norfolk Harbor and the United States navy-yard at Norfolk: Continuing improvement by widening the channel of Elizabeth River to the port-warden's line on the eastern side, between Lambert's Point Light and Fort Norfolk, one hundred and eighty-seven thousand five hundred dollars; of which fifty thousand dollars shall be expended in improving the harbor, and one hundred and thirty-seven thousand five hundred dollars in widening the channel of Elizabeth River to the port-warden's line on the eastern side, between Lambert's Point Light and Fort Norfolk, beginning at Lambert's Point Light, including the construction of the proposed dike.

Norfolk, Va.,
approach to harbor and navy-yard.

Improving harbor at Beaufort, North Carolina: Continuing improvement, fifteen thousand dollars.

Beaufort, N. C.

Improving harbor at Edenton Bay, North Carolina: Continuing improvement, two thousand dollars.

Edenton Bay, N. C.

Improving the inland water way between New Berne and Beaufort, North Carolina, ten thousand dollars.

Waterway,
Newbern and Beaufort, N. C.

Improving harbor at Charleston, including Sullivan's Island, South Carolina: Continuing improvement, one hundred and eighty-seven thousand five hundred dollars.

Charleston, S. C.

Improving Winyaw Bay, South Carolina: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

Winyaw Bay, S. C.

Improving harbor at Georgetown, South Carolina: Continuing improvement, five thousand dollars.

Georgetown, S. C.

Improving harbor at Brunswick, Georgia: Continuing improvement, twenty-two thousand five hundred dollars.

Brunswick, Ga.

Improving Cumberland Sound, Georgia and Florida: Continuing improvement, one hundred and twelve thousand five hundred dollars.

Cumberland Sound, Ga. and Fla.

Improving harbor at Savannah, Georgia: Continuing improvement, one hundred and fifty thousand dollars.

Savannah, Ga.

Improving harbor at Apalachicola Bay, Florida: Continuing improvement, twelve thousand dollars; of which two thousand dollars may, in the discretion of the Secretary of War, be expended at the Carabello or Crooked River.

Apalachicola Bay, Fla.

For examination and survey of the entrance to harbor at Key West, Florida, two thousand five hundred dollars.

Key West, Fla., survey of entrance.

Improving harbor at Pensacola, Florida: Continuing improvement, twenty thousand dollars.

Pensacola, Fla.

- Tampa Bay, Fla. Improving harbor at Tampa Bay, Florida: Continuing improvement, ten thousand dollars.
- Cedar Keys, Fla. Improving harbor at Cedar Keys, Florida, seven thousand dollars.
- Mobile, Ala. Improving harbor at Mobile, Alabama: Continuing improvement, ninety thousand dollars.
- Biloxi, Miss. Improving harbor at Biloxi Bay, Mississippi: Continuing improvement, twelve thousand five hundred dollars; which sum, together with the money on hand heretofore appropriated for the roadstead, is hereby directed to be used in deepening the channel from Mississippi Sound to the wharves at Biloxi.
- Aransas Pass and Bay, Tex. Improving Aransas Pass and Bay up to Rockport and Corpus Christi, Texas: Continuing improvement, one hundred and one thousand two hundred and fifty dollars.
- Brazos Santiago, Tex. Improving Brazos Santiago Harbor, Texas: Continuing improvement, thirty-seven thousand five hundred dollars.
- Galveston, Tex. Improvement of entrance to Galveston Harbor, Texas: Continuing improvement, three hundred thousand dollars.
- Pass Cavallo, Tex. Improving Pass Cavallo, Texas: Continuing improvement, thirty-seven thousand five hundred dollars.
- Sabine Pass, Blue Buck bar, Tex. Improving Sabine Pass and Blue Buck Bar, Texas: Continuing improvement, one hundred and ninety-eight thousand seven hundred and fifty dollars.
- Galveston Bay ship channel, Tex. Improving ship-channel in Galveston Bay, Texas, from Morgan's Cut to Bolivar Channel: Continuing improvement, for which purpose the balance now remaining of the money heretofore appropriated for this work is hereby directed to be expended by the Secretary of War in the completion of said channel, in accordance with the plans heretofore adopted, and in marking out said channel by piles or stakes, so as to enable navigators to find the same without difficulty.
- Ashtabula, Ohio. Improving harbor at Ashtabula, Ohio: Continuing improvement, thirty thousand dollars.
- Black River (Lorain). Improving harbor at mouth of Black River, Ohio: Continuing improvement, ten thousand dollars.
- Cleveland, Ohio. Improving harbor at Cleveland, Ohio, on the last plan projected, ninety-three thousand seven hundred and fifty dollars; of which thirty thousand dollars are to be used in building a parapet on the existing breakwater, and the one hundred thousand dollars now on hand to be available for work on the last plan.
- Fairport, Ohio. Improving harbor at Fairport, Ohio: Continuing improvement, eighteen thousand seven hundred and fifty dollars.
- Huron, Ohio. Improving harbor at Huron, Ohio: Continuing improvement, three thousand dollars.
- Muskingum River, Ohio. Improving ice-harbor at the mouth of the Muskingum River, Ohio: Continuing improvement, thirty-seven thousand five hundred dollars.
- Port Clinton, Ohio. Improving harbor at Port Clinton, Ohio, by repairs of existing works, two thousand dollars.

For the purpose of acquiring the title to the land adjoining the inner end of the west pier built by the United States for the improvement of the harbor at Port Clinton, Ohio, the Secretary of War shall negotiate with the owner or owners of the land for the purchase thereof at a reasonable price, to be approved by Congress; and if an agreement as to price cannot be made with the owner, then the value of the same shall be ascertained in the mode provided by the laws of Ohio for the condemnation of lands for public uses in that State, the result of said proceedings of condemnation, if taken, to be reported to the next Congress for its approval.

Purchase of
land at.
Vol. 27, p.
93.
Post, p. 618.

Improving harbor at Sandusky City, Ohio, by dredging the channel through the outer bar and within the bay; and for this purpose the money appropriated by act of July fifth, eighteen hundred and eighty-four, now on hand, is hereby made available, and the further sum of five thousand dollars is hereby appropriated.

Sandusky,
Ohio.

Improving harbor at Toledo, Ohio: Continuing improvement of the Maumee River, by a straight channel along such line as may be approved by the Secretary of War, one hundred and twelve thousand five hundred dollars; and the balance of the twenty-five thousand dollars heretofore appropriated are hereby made available for clearing the old channel.

Toledo, Ohio.

Improving harbor at Vermillion, Ohio: Continuing improvement, three thousand dollars.

Vermillion
Ohio.

Improving harbor at Michigan City, Indiana: Continuing improvement, fifty-six thousand two hundred and fifty dollars; of which sum one thousand eight hundred and seventy-five dollars are to be used on the inner harbor.

Michigan
City, Ind.

Improving harbor at Calumet, Illinois: Continuing improvement, ten thousand dollars.

Calumet, Ill.

Improving harbor at Chicago, Illinois: Continuing improvement, seventy-five thousand dollars.

Chicago, Ill.

Improving harbor at Waukegan, Illinois: Continuing improvement, twenty thousand dollars.

Waukegan,
Ill.

Improving harbor at Charlevoix and entrance to Pine Lake, Michigan: Continuing improvement, ten thousand dollars.

Charlevoix,
Mich.

Improving harbor at Cheboygan, Michigan: Continuing improvement, fifteen thousand dollars.

Cheboygan,
Mich.

Improving harbor at Frankfort, Michigan, by extension of piers and repairs: Continuing improvement, seven thousand dollars.

Frankfort,
Mich.

Improving harbor at Grand Haven, Michigan: Continuing improvement, thirty thousand dollars.

Grand
Haven, Mich.

Improving harbor of refuge at Grand Marais, Michigan: Continuing improvement, twenty-six thousand two hundred and fifty dollars.

Grand Ma-
rais, Mich.

Improving harbor at Ludington, Michigan: Continuing improvement, fifty-six thousand two hundred and fifty dollars.

Ludington,
Mich.

- Manistee, Mich. Improving harbor at Manistee, Michigan: Continuing improvement, ten thousand dollars.
- Marquette, Mich. Improving harbor at Marquette, Michigan: Continuing improvement, ten thousand dollars.
- Monroe, Mich. Improving harbor at Monroe, Michigan: By repairs, two thousand dollars.
- Muskegon, Mich. Improving harbor at Muskegon, Michigan: Continuing improvement, twelve thousand five hundred dollars.
- Ontonagon, Mich. Improving harbor at Ontonagon, Michigan: Continuing improvement, thirteen thousand dollars.
- Pentwater, Mich. Improving harbor at Pentwater, Michigan: Continuing improvement, ten thousand dollars.
- Portage Lake, Mich. Improving harbor at Portage Lake, Michigan: Continuing improvement, fifteen thousand dollars.
- Sand Beach (Harbor Beach), Mich. Improving and repairing harbor of refuge at Sand Beach, Michigan: Continuing improvement, seventy-five thousand dollars; of which not exceeding forty-five thousand dollars are to be used in repairs.
- St. Joseph, Mich. Improving harbor at Saint Joseph, Michigan: Continuing improvement, ten thousand dollars.
- Saugatuck, Mich. Improving harbor at Saugatuck, Michigan: To complete improvement, eight thousand dollars.
- South Haven, Mich. Improving harbor at South Haven, Michigan: Continuing improvement, five thousand dollars.
- White River (Lake), Mich. Improving harbor at White River, Michigan: Continuing improvement, ten thousand dollars.
- Black Lake (Holland). Improving harbor at Black Lake, Michigan: Continuing improvement, five thousand dollars.
- Ahnapee, Wis. Improving harbor at Ahnapee, Wisconsin: Continuing improvement, fifteen thousand dollars; but no part of said sum is to be expended until the wharfrage over the Government piers at that port shall be made free.
- Wharfrage to be free. Vol. 25, p. 406. Post, p. 492.
- Green Bay, Wis. Improving harbor at Green Bay, Wisconsin: Continuing improvement, seven thousand dollars.
- Kenosha, Wis. Improving harbor at Kenosha, Wisconsin: Continuing improvement, five thousand dollars.
- Kewaunee, Wis. Improving harbor at Kewaunee, Wisconsin: Continuing improvement, ten thousand dollars.
- Manitowoc, Wis. Improving harbor at Manitowoc, Wisconsin: Continuing improvement, fifteen thousand dollars.
- Menominee, Wis. Improving harbor at Menominee, Wisconsin: Continuing improvement, three thousand dollars.
- Milwaukee, Wis. Improving harbor of refuge at Milwaukee, Wisconsin: Continuing improvement on bay and harbor, sixty thousand dollars.
- Oconto, Wis. Improving harbor at Oconto, Wisconsin: Continuing improvement, eight thousand dollars.
- Port Washington, Wis. Improving harbor at Port Washington, Wisconsin: Continuing improvement, five thousand dollars.
- Racine, Wis. Improving harbor at Racine, Wisconsin: Continuing improvement, ten thousand dollars.
- Superior and St. Louis bays, Wis. Improving harbor at Superior Bay and Saint Louis Bay, Wisconsin: Continuing improvement, twenty-two thousand five hundred dollars; and the engineer in

charge, in his next annual report, shall submit an estimate of the cost of a dredge-boat or other facilities that may be needed for dredging the harbors of Duluth and Superior. Thirteen thousand five hundred dollars of the money hereby appropriated are to be expended in dredging in said Superior Bay and Harbor, and in repairing piers at natural entry, and nine thousand dollars in dredging Saint Louis Bay, along the dock-line on the Wisconsin shore, from deep water at Connor's Point towards deep water at Grassy Point.

Improving harbor at Sheboygan, Wisconsin: Continuing improvement, fifteen thousand dollars. Sheboygan, Wis.

Improving harbor at Sturgeon Bay, Wisconsin: Continuing improvement, five thousand dollars. Sturgeon Bay, Wis.

Improving harbor at Ashland, Wisconsin: Continuing improvement, twenty-two thousand five hundred dollars. Ashland, Wis.

The Secretary of War is authorized and directed to appoint a Board of three engineers from the United States Army whose duty it shall be to examine, in all their relations to commerce, the Sturgeon Bay and Lake Michigan Ship Canal, connecting the waters of Green Bay with Lake Michigan, in the State of Wisconsin, with a view to making the same a free passage way and harbor of refuge, to consider their value, and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon; and five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose.

Improving harbor at Duluth, Minnesota: Continuing improvement, and enlarging basin between Minnesota and Rice's Points, fifty-six thousand two hundred and fifty dollars; of which a sum not exceeding five hundred dollars may be used in placing buoys in the channels and elsewhere where needed in the harbor; and the consent of the United States is hereby given to a change of the existing dock-line on the east side of Rice's Point by the municipal authorities of Duluth: *Provided*, That such change meets the approval of the Secretary of War. Duluth, Minn.

Improving harbor at Grand Marais, Minnesota: Continuing improvement, ten thousand dollars. Grand Marais, Minn.

Improving harbor at Agate Bay, Minnesota, twenty-two thousand five hundred dollars. Agate Bay, Minn.

Improving harbor at Lake City, Minnesota: Continuing improvement, ten thousand dollars. Lake City, Minn.

Improving harbor and bay at Humboldt, California: Continuing improvement, seventy-five thousand dollars: *Provided*, That no part of said sum shall be expended until the twelve acres of land necessary to said improvement shall have been conveyed to the United States free of ex- Humboldt, Cal.
Proviso.

pense, and such conveyance has been approved by the Secretary of War, after the Attorney-General of the United States shall have certified to the Secretary of War that the title is perfect.

Oakland, Cal. Improving harbor at Oakland, California, Continuing improvement, sixty thousand dollars.

Survey of San Francisco Harbor, San Pablo Bay, Suisun Bay, Strait of Carquines, San Joaquin and Sacramento rivers. The sum of eleven thousand dollars, or as much thereof as may be necessary, is hereby appropriated for a survey of San Francisco Harbor, San Pablo Bay, Suisun Bay, Strait of Carquines [Karquines], mouth of San Joaquin River, and mouth of Sacramento River, California.

Red wood, Cal. Improving harbor at Red Wood, California: Continuing improvement, five thousand dollars.

Survey, etc., of San Diego, Newport, and San Luis Obispo harbors, Cal. The sum of five thousand dollars, or so much thereof as may be necessary, is hereby appropriated for examination, survey, and estimated cost of obtaining a channel two hundred and fifty feet wide and twenty-four feet deep at mean low water across the outer bar, and from thence to a point abreast of beacon number two, in San Diego Harbor, California; also, of obtaining a navigable channel at least eight feet in depth at mean low water at Newport Harbor, California; also, of the establishment of a breakwater extending in a southeasterly direction one-fourth of a mile, more or less, along the sunken reef commencing at or near Whaler's Point, so called, at San Luis Obispo Harbor, California.

Wilmington, Cal. Improving harbor at Wilmington, California: Continuing improvement, seventy-five thousand dollars.

Yaquina Bay, Oreg. Improving harbor at Yoquina Bay, Oregon: Continuing improvement, seventy-five thousand dollars.

Coos Bay, Oreg. Improvement of the harbor at entrance of Coos Bay, Oregon, thirty-three thousand seven hundred and fifty dollars.

Lubec Channel. Improving Lubec Channel, Maine: Continuing improvement, ten thousand dollars.

Moosabec bar. Improving Moosebec Bar, Maine: Continuing improvement, ten thousand dollars.

Penobscot River. Improving Penobscot River, Maine: Continuing improvement, be [*sic*] widening the channel opposite Bangor and removing obstructions near Crosby's Narrows, fifteen thousand dollars.

Saco River. Improving Saco River, Maine, twelve thousand five hundred dollars.

Narraguagus River. Improving Narraguagus River, Maine, ten thousand dollars.

Cocheco River. Improving Cocheco River, New Hampshire: Continuing improvement, ten thousand dollars.

Ipswich River. Improving Ipswich River, Massachusetts, two thousand five hundred dollars.

Warren River. Improving Warren River, Rhode Island, five thousand dollars.

Pawtucket River. Improving Pawtucket River, Rhode Island: Continuing improvement, thirty thousand dollars.

Improving Providence River and Narragansett Bay, Providence River, Narragansett Bay. Rhode Island: Continuing improvement, thirty thousand dollars.

For removing Green Jacket Shoal, Providence River, Rhode Island, twenty-six thousand two hundred and fifty dollars. Green Jacket shoal.

Improving Pawcatuck River, Rhode Island, twelve thousand dollars. Pawcatuck River.

Improving Connecticut River below Hartford, Connecticut: Continuing improvement, twenty-six thousand two hundred and fifty dollars. Connecticut River.

Improving Housatonic River, Connecticut, five thousand dollars. Housatonic River.

Improving Thames River, Connecticut: Continuing improvement, twenty-two thousand five hundred dollars. Thames River.

Improving East Chester Creek, New York: Continuing improvement, ten thousand dollars. East Chester Creek.

Improving Hudson River, New York: Continuing improvement, twenty-six thousand two hundred and fifty dollars; of which fifteen thousand dollars may be used for the removal of the rock in channel at Van Wie's Point. Hudson River.

Improving Newtown Creek and Bay, New York: Continuing improvement, thirty-seven thousand five hundred dollars; of which nine thousand three hundred and seventy-five dollars to be expended on west branch between Maspeth avenue and Dual Bridge, at Grand street and Metropolitan avenue; nine thousand three hundred and seventy-five dollars to be expended on main branch between Easterly Grand Street bridge to Metropolitan avenue; and balance on lower end, from Maspeth avenue to the mouth of the creek. Newtown Creek and Bay.

Improving Hell Gate, New York: Continuing improvement one hundred and twelve thousand five hundred dollars. Hell Gate.

Improving Narrows at Lake Champlain, New York, from Benson, Vermont, to canal locks at Whitehall, New York, thirty thousand dollars. Lake Champlain, Narrows.

Improving Ticonderoga River, New York. Continuing improvement, two thousand dollars. Ticonderoga River.

Improving Maurice River, New Jersey: Continuing improvement, five thousand dollars. Maurice River.

Improving Passaic River, New Jersey: Continuing improvement, twenty-six thousand two hundred and fifty dollars; of which two thousand two hundred and fifty dollars are to be used above Newark. Passaic River.

Improving Raritan River, New Jersey: Continuing improvement, twenty-six thousand two hundred and fifty dollars. Raritan River.

Improving Shrewsbury River, New Jersey: Continuing improvement, ten thousand dollars. Shrewsbury River.

Improving South River, New Jersey: Continuing improvement, five thousand dollars. South River.

- St. Jones River.** Improving Saint Jones River, Delaware: Continuing improvement, ten thousand dollars.
- Nanticoke River.** Improving Nanticoke River, Delaware: Continuing improvement up to and near the town of Laurel, Delaware, ten thousand dollars.
- Monongahela River.** Improving Monongahela River, Pennsylvania and West Virginia: Continuing improvement, ninety thousand nine hundred dollars; but no charges or tolls shall be collected on any other part of the river on any commerce on said river which originates above the works herein appropriated for.
- Allegheny River.** For beginning the construction of a dam at Herr's Island, in the Allegheny River, near Pittsburgh, Pennsylvania, thirty-seven thousand five hundred dollars.
- Improving Allegheny River, Pennsylvania: Continuing improvement, thirty thousand dollars.
- Schuylkill River.** Improving Schuylkill River, Pennsylvania: Continuing improvement, eighteen thousand seven hundred and fifty dollars.
- Delaware River.** Improving Delaware River, Pennsylvania and New Jersey: Continuing improvement from Trenton to its mouth, two hundred and ten thousand dollars; of which thirty thousand dollars shall be applied to improving the channel between Camden, New Jersey, and Philadelphia, Pennsylvania, and seven thousand five hundred dollars, or so much thereof as may be needed, shall be expended on said river and its tidal tributaries above Bridesburg.
- Choptank River.** Improving Choptank River, Maryland: Continuing improvement, ten thousand dollars.
- Corsica Creek.** Improving Corsica Creek, Maryland: Continuing improvement, ten thousand dollars.
- Chesapeake Bay.** For rebuilding piers at Battery Island, head of the Chesapeake Bay, which were carried away by ice, strengthening and protecting the works at that point from future destruction, seventeen thousand two hundred and seventy-five dollars.
- Susquehanna River.** Improving Susquehanna River, Maryland and Pennsylvania: Continuing improvement, six thousand dollars; to be expended above the Philadelphia, Wilmington and Baltimore Railroad Bridge.
- Pocomoke River.** Improving Pocomoke River, Maryland: Continuing and completing improvement, eight thousand dollars.
- Waterway from Chincoteague Bay to Indian River Bay.** Improving, by dredging and otherwise, the inland waterway from Chincoteague Bay, Virginia, to Delaware Bay at or near Lewes, Delaware, to be used from Chincoteague Bay to Indian River Bay, eighteen thousand seven hundred and fifty dollars.
- Appomattox River.** Improving Appomattox River, Virginia: Continuing improvement, eighteen thousand seven hundred and fifty dollars.
- Chickahominy River.** Improving Chickahominy River, Virginia: Continuing improvement, four thousand dollars.

Improving James River, Virginia: Continuing improvement below Richmond, one hundred and twelve thousand five hundred dollars. James River.

Improving Mattaponi River, Virginia: Continuing improvement, five thousand dollars. Mattaponi River.

Improving New River, Virginia: Continuing improvement between the lead-mines, in Wythe County, and the mouth of Wilson's Creek, in Grayson County, ten thousand dollars, together with the three thousand dollars now on hand. New River.

Improving Pamunky River, Virginia: Continuing improvement, five thousand dollars. Pamunky River.

Improving Rappahannock River, Virginia: Continuing improvement, twenty thousand dollars. Rappahannock River.

Improving Staunton River, Virginia: Continuing improvement, ten thousand dollars; one-half of which is to be expended between the mouth of Pig River and the Midland Railroad Crossing. Staunton River.

Improving York River, Virginia: Continuing improvement, eighteen thousand seven hundred and fifty dollars. York River.

Improving Dan River, Virginia: Continuing improvement, ten thousand dollars. Dan River.

Improving Big Sandy River, West Virginia and Kentucky: Continuing improvement, thirty thousand dollars; of which sum three thousand seven hundred and fifty dollars are to be expended on Tug Fork, in West Virginia, and three thousand seven hundred and fifty dollars on Iavisa Fork, in Kentucky. Big Sandy River.

Improving Buckhannon River, West Virginia: Continuing improvement, one thousand five hundred dollars. Buckhannon River.

Improving Great Kanawha River, West Virginia: Continuing improvement, one hundred and eighty-seven thousand five hundred dollars. Kanawha River.

Improving Elk River, West Virginia: Continuing improvement, one thousand five hundred dollars. Elk River.

Improving Guyandotte River, West Virginia: Continuing improvement, the amount heretofore appropriated is hereby made available for this purpose. Guyandotte River.

Improving Little Kanawha River, West Virginia: Continuing improvement, sixteen thousand eight hundred and seventy-five dollars; of which one thousand eight hundred and seventy-five dollars shall be used in continuing the improvement of navigation above the west fork. But no toll shall be collected by any person or corporation for this improved navigation; and such right, if any exist, shall be relinquished, in a manner satisfactory to the Secretary of War, before the expenditure of any of the money herein appropriated for this work. Little Kanawha River.

Improving Cape Fear River, North Carolina: Continuing improvement, one hundred and sixty-eight thou- Cape Fear River.

sand seven hundred and fifty dollars; of which sum eleven thousand two hundred and fifty dollars are to be expended above Wilmington, the remainder below and opposite the city of Wilmington, including as much of its northeast branch as lies in front of Wilmington, within the city limits.

- Contentnia Creek.** Improving Contentnia Creek, North Carolina: Continuing improvement, fifteen thousand dollars.
- Carrituck Sound.** Improving Carrituck Sound, Coanjok Bay, and North River Bar, North Carolina: Continuing improvement, ten thousand dollars.
- Neuse River.** Improving Neuse River, North Carolina: Continuing improvement, twenty-two thousand five hundred dollars.
- New River.** Improving New River, North Carolina: Continuing improvement, ten thousand dollars.
- Pamlico and Tar rivers.** Improving Pamlico and Tar Rivers, North Carolina: Completing improvement, five thousand dollars.
- Black River. Proviso.** Improving Black River, North Carolina, three thousand dollars: *Provided*, That all claims of private parties to the navigation of the river shall be ceded to the United States, free of charge, before the commencement of said improvement.
- Roanoke River.** Improving Roanoke River, North Carolina: Continuing improvement, twenty thousand dollars. Two thousand five hundred dollars, or so much thereof as may be necessary, of the aforesaid twenty thousand dollars shall be used for the purpose of removing obstructions in the Thoroughfare and Coshoke Creek.
- Trent River.** Improving Trent River, North Carolina: Continuing improvement, three thousand five hundred dollars.
- Dan River.** Improving Dan River, North Carolina: Continuing improvement, between Madison, North Carolina, and Danville, Virginia, ten thousand dollars.
- Yadkin River.** Improving Yadkin River, North Carolina: Continuing improvement, ten thousand dollars.
- Waterway, Beaufort to New River.** Improving the inland waterway between Beaufort Harbor and New River, North Carolina, through Bogue Sound, ten thousand dollars.
- Ashley River.** Improving Ashley River, South Carolina: Continuing improvement, one thousand dollars.
- Edisto River.** Improving Edisto River, South Carolina: Continuing improvement, three thousand dollars.
- Great Pee Dee River.** Improving Great Pee Dee River, South Carolina: Continuing improvement, twenty thousand dollars.
- Salkahatchie River.** Improving Salkiehatchie River, South Carolina: Continuing improvement, two thousand dollars.
- Santee River.** Improving Santee River, South Carolina: Continuing improvement, eighteen thousand seven hundred and fifty dollars; no part of which sum to be used for the construction of any road-bridge across the Mosquito Creek Canal: *Provided*, That if salt water be found flowing into said Mosquito Creek, five thousand dollars of said sum, or so much thereof as may be necessary, shall be used for the

construction of a flood-gate at the upper end of the canal, to prevent the same.

Improving Waccamaw River, South Carolina: Continuing improvement, fifteen thousand dollars. Waccamaw River.

Improving Wappoo Cut, South Carolina: Continuing improvement, five thousand dollars. Wappoo Cut.

Improving Wateree River, South Carolina: Continuing improvement, seven thousand five hundred dollars. Wateree River.

Improving Congaree River, South Carolina, seven thousand five hundred dollars. Congaree River.

Improving Altamaha River, Georgia: Continuing improvement, twenty thousand dollars; of which ten thousand dollars are to be used on Doboy Bar, or so much thereof as may be necessary. Altamaha River.

Improving Chattahoochee River, Georgia and Alabama: Continuing improvement, twenty thousand dollars. Chattahoochee River.

Improving Coosa River, Georgia and Alabama: Continuing improvement, forty-five thousand dollars. Coosa River.

Improving Flint River, Georgia: Continuing improvement, twenty thousand dollars; of which sum five thousand dollars are to be expended between Albany and Montezuma, and fifteen thousand dollars below Albany. Flint River.

Improving Ocmulgee River, Georgia: Continuing improvement, seven thousand five hundred dollars. Ocmulgee River.

Improving Oconee River, Georgia: Continuing improvement, nine thousand dollars; one thousand five hundred dollars of said sum to be expended between Skull Shoals and the Railroad Bridge. Oconee River.

Improving Romely [Romerly] Marsh, Georgia: To complete improvement, seventeen thousand four hundred and seventy-five dollars; and so much of said sum as may be necessary may be applied by the engineer in charge, with the approval of the Secretary of War, to pay for work done on said improvement, under the direction of the War Department, since the last appropriation was exhausted. Romerly Marsh.

Improving Savannah River, below Augusta, Georgia: Continuing improvement, fifteen thousand dollars. Savannah River.

Improving Apalachicola River, Florida: Continuing improvement, one thousand dollars. Apalachicola River.

Improving Caloosahatchee River, Florida: Continuing improvement, four thousand dollars. Caloosahatchee River.

Improving Choctawatchee River, Florida and Alabama: Continuing improvement, fifteen thousand dollars; of which sum five thousand dollars to be expended below Geneva, and ten thousand dollars to be expended between Geneva and Newton, Alabama. Choctawatchee River.

Improving Conecuh-Escambia River, Florida and Alabama: Continuing improvement, twelve thousand dollars. Conecuh-Escambia River.

Improving La Grange Bayou, Florida: Continuing improvement, two thousand dollars. Lagrange Bayou.

- Manatee and Peace rivers. Improving Manatee and Pease Rivers, Florida: Continuing improvement, thirteen thousand dollars; of which five thousand dollars may be expended on Pease River.
- St. Johns River. Improving channel over the bar at the mouth of Saint John's River, Florida: Continuing improvement, one hundred and fifty thousand dollars.
- Suwannee River. Improving Suwannee River, Florida: Continuing improvement, five thousand dollars.
- Volusia bar. Improving Volusia Bar, Florida: To complete improvement, seven thousand five hundred dollars.
- Withlacoochee River. Improving Withlacoochee River, Florida: Continuing improvement, three thousand dollars.
- Alabama River. Improving Alabama River, Alabama: Continuing improvement, fifteen thousand dollars.
- Black Warrior River. Improving Black Warrior River from Tuscaloosa to Daniel's Creek, Alabama, fifty-six thousand two hundred and fifty dollars, together with the forty-seven thousand dollars on hand; to be expended in accordance with the plan adopted by the board of engineers.
- Cahaba River. Improving Cahawba River, Alabama: Continuing improvement, seven thousand five hundred dollars: *Provided*, That no part of said sum shall be expended until the officer in charge shall have reported that the railroad and other bridges across said river have been provided with good and sufficient draw-openings.
- Tallapoosa River. Improving Tallapoosa River, Alabama: Continuing improvement, seven thousand five hundred dollars.
- Warrior River. Improving Warrior River, Alabama: Continuing improvement, eighteen thousand seven hundred and fifty dollars; to be expended below Tuscaloosa.
- Tombigbee River. Improving Tombigbee River, Alabama and Mississippi: Continuing improvement, eighteen thousand seven hundred and fifty dollars; to be expended below Vienna, eleven thousand two hundred and fifty dollars; and between Vienna and Fulton, seven thousand five hundred dollars.
- Big Sunflower River. Improving Big Sunflower River, Mississippi: Continuing improvement, five thousand dollars; of which two thousand dollars to be expended between Woodburn and Lehrton.
- Noxubee River. Improving Noxubee River, Mississippi: Continuing improvement, seven thousand five hundred dollars.
- Pascagoula River. Improving Pascagoula River, Mississippi: Continuing improvement, including bar at the mouth, and from there to the mills at Moss Point, twenty thousand dollars; and the balance of the money now on hand heretofore appropriated for improving Horn Island Pass is to be applied to the same purpose.
- Pearl River. Improving Pearl River, Mississippi: Continuing improvement, seventeen thousand six hundred and twenty-five dollars; of which two thousand two hundred and fifty dollars are to be expended between Edinburg and Carthage, two thousand two hundred and fifty dollars

between Carthage and Jackson, and the remainder below Jackson, including bar at the mouth of East Pearl River.

Improving Steele's Bayou, Mississippi, including Washington Bayou: Continuing improvement, two thousand five hundred dollars.

Steele Bayou.

Improving Tallahatchee River, Mississippi: Continuing improvement, three thousand five hundred dollars.

Tallahatchee River.

Improving Tchula Lake, Mississippi: Continuing improvement, two thousand dollars.

Tchula Lake.

Improving Yallobusha River, Mississippi: Continuing improvement, two thousand dollars.

Yallobusha River.

Improving Bayou Pierre, Mississippi: Continuing improvement, five thousand dollars.

Bayou Pierre.

Improving Yazoo River, Mississippi: Continuing improvement, fifteen thousand dollars; of which five thousand dollars, or so much as may be necessary, to be used in repairing snag-boat.

Yazoo River.

Improving Big Black River, Mississippi: Continuing improvement, five thousand dollars: *Provided*, That no part of this appropriation shall be used until the State of Mississippi shall have first caused the bridges over said stream south of the Vicksburg and Meridan Railroad to be so constructed as not to obstruct the navigation of said stream.

Big Black River.
Proviso.
Vol. 26, p. 444.
Post, p. 568.

Improving Amite River, Louisiana: Continuing improvement, two thousand dollars.

Amite River.

Improving Bœuf River, Louisiana: Continuing improvement, and for closing Outlet Number One, five thousand dollars.

Bœuf River.

Improving Bayou Bartholomew, Louisiana and Arkansas: Continuing improvement, five thousand dollars.

Bayou Bartholomew.

Improving Bayou Courtableau, Louisiana: Continuing improvement, five thousand dollars.

Bayou Courtableau.

Improving Bayou D'Arbonne, Louisiana: Continuing improvement, two thousand dollars.

Bayou D'Arbonne.

Improving Bayou Terrebonne, Louisiana: Continuing improvement, ten thousand dollars.

Bayou Terrebonne.

Improving Cypress Bayou and the lakes between Jefferson, Texas, and Shreveport, Louisiana, Texas and Louisiana: To complete improvement, eighteen thousand dollars.

Cypress Bayou.

Improving Tensas River and Bayou Macon, Louisiana: Continuing improvement, four thousand dollars.

Tensas River and Bayou Macon.

Improving Red River, Louisiana, and Arkansas: Continuing improvement from Fulton, Arkansas, to the Atchafalaya River, Louisiana, including completing the work at Alexandria, seventy-five thousand dollars; of which sum twenty-five thousand dollars, or so much thereof as may be necessary, shall be used in making a thorough survey of the river from Fulton, Arkansas to the Atchafalaya River, and in completing the survey of Bayou Pierre, Louisiana.

Red River.

Improving Tchefuncte River and Bogue Falia, Louisiana: Continuing improvement, two thousand five hun-

Chefuncte River and Bogue Falia.

dred dollars; to be expended in the improvement of Bogue Failia up to Covington.

Tickfaw River. Improving Tickfaw River, Louisiana: Continuing improvement, two thousand dollars; to be expended on its navigable tributaries.

Ouachita and Black rivers. Improving Ouachita River, Louisiana and Arkansas, and Black River, Louisiana: Continuing improvement, seventeen thousand five hundred dollars; of which seven thousand five hundred dollars, or so much thereof as may be necessary, for repairing snag-boat *Wagner*.

Calcasieu River and Pass. Improving Calcasieu River and Pass, Louisiana: Continuing improvement to secure a navigable channel eight feet deep over the bars affecting the entrance to said river and pass, and for this purpose the money on hand heretofore appropriated for improvement of Calcasieu River is to be used.

Brazos River. Improving mouth of Brazos River, Texas: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

Buffalo Bayou. Improving Buffalo Bayou, Texas: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

St. Francis River. Improving Saint Francis River, Arkansas and Missouri, to the town of Saint Francis: Continuing improvement, eight thousand dollars.

Arkansas River. Improving Arkansas River, Arkansas: Continuing improvement, seventy-five thousand dollars, according to the

plan and recommendations in Appendix V thirteen, Executive Document One, Forty-ninth Congress; of which there are to be expended eight thousand dollars at Pine Bluff, thirteen thousand dollars at Fort Smith, and ten thousand dollars at Dardanelles, or so much thereof under those sums, respectively, as may be necessary at those points.

Removal of snags, etc. For the removal of snags, wrecks, and other obstructions in the Arkansas River, nineteen thousand eight hundred and seventy-five dollars; of which sum one thousand one hundred and twenty-five dollars, or so much thereof as may be necessary, shall be used to complete the survey of the Arkansas River, between Little Rock, Arkansas, and Wichita, Kansas.

Red River. Improving Red River, Arkansas, above Fulton, Arkansas, seven thousand dollars.

Little Red River. Improving Little Red River, Arkansas, three thousand dollars.

Black River. Improving Black River, Arkansas and Missouri, five thousand dollars.

Petit Jean River. Improving Petit Jean River, Arkansas, three thousand five hundred dollars.

White River. Improving White River, Arkansas: Continuing improvement, eighteen thousand dollars; thirteen thousand dollars of which, or so much thereof as may be necessary, to complete the survey of said river; the remainder for general improvement.

For removing the rock shoals in Fourche [Le Fevre] River, Arkansas, situate four miles south of Perryville, in Perry County, Arkansas, according to the plans of the engineers for creating a fifty-foot channel, five thousand dollars.

Fourche Le Fevre River.

Improving Big Hatchee River, Tennessee: Continuing improvement, three thousand dollars.

Hatchee River.

Improving Caney Fork River, Tennessee: Continuing improvement, three thousand dollars.

Caney Fork River.

Improving Clinch River, Tennessee: Continuing improvement, five thousand dollars.

Clinch River.

Improving Cumberland River, Tennessee and Kentucky: Continuing improvement above Nashville, with a view to secure in the channel a depth of four feet, commencing with the lock at or near the lower island at Nashville, seventy-five thousand dollars.

Cumberland River.

Improving Cumberland River below Nashville, Tennessee: Continuing improvement, twelve thousand five hundred dollars.

Improving French Broad River, Tennessee: Continuing improvement, six thousand dollars.

French Broad River.

Improving Hiwassee River, Tennessee: Continuing improvement, two thousand five hundred dollars.

Hiwassee River.

Improving South Fork of Forked Deer River, Tennessee: Continuing improvement, five thousand dollars.

South Fork, Forked Deer River.

Improving Tennessee River above Chattanooga, Tennessee: Continuing improvement, seven thousand five hundred dollars.

Tennessee River.

Improving Tennessee River at Big Mussel Shoals, Little Mussel Shoals, and Elk River Shoals, Alabama: To complete improvements at these localities, two hundred and sixty-two thousand five hundred dollars.

Improving South Fork of Cumberland River, Kentucky: Continuing improvement, five thousand dollars.

South Fork, Cumberland River.

Improving Kentucky River, Kentucky: Continuing improvement, one hundred and eighty-seven thousand five hundred dollars.

Kentucky River.

Improving Tradewater River, Kentucky: Continuing improvement, two thousand dollars.

Tradewater River.

Improving the Falls of the Ohio River at Louisville, Kentucky: Continuing improvement, according to the last plan of the engineer in charge, and to be first applied to the completion of the work now in progress, one hundred and fifty thousand dollars: *Provided*, That of that sum fifty thousand dollars shall be expended in enlarging the canal basin, as recommended in the last report of the engineer in charge.

Falls of the Ohio River, Louisville.

Provido.

The Secretary of War is hereby authorized and directed to ascertain the value and commercial importance of the works and property of the Green and Barren River Navigation Company, situated on the Green and Barren rivers, in the State of Kentucky, and of the Monongahela Navigation Company, situated on the Monongahela River, in the State of Pennsylvania; and in

Board of Engineers to report on the value, etc., of the works of Green and Barren River Navigation Co., and Monongahela Co.

order to acquire such information the Secretary of War shall appoint a board of three competent engineers from the Engineers Corps of the United States Army, which board shall in each case report to the Secretary of War, who shall report thereon to Congress at its next succeeding session; and the cost of such examination shall be paid out of the sum appropriated by this act for surveys:

Proviso.
Muskingum
River.

Acceptance
from Ohio of
Muskingum
River improve-
ments, canal,
etc.

Provided, That nothing herein shall be construed as committing Congress to the purchase of the said works.

Improvement of the Muskingum River, Ohio, between Zanesville and the mouth of the river, and for operating the same, twenty thousand dollars. And the United States hereby accepts from the State of Ohio the said Muskingum River improvement, and all the locks, dams, and their appurtenances, and the canals, belonging to said improvement, and all the franchises and property of every kind, and rights, in said river, and its improvements, now owned, held, and enjoyed by the State of Ohio, including all water leases and rights to use water under and by virtue of any lease of water now running and in force between the State of Ohio and all persons using said water, hereby intending to transfer to the United States such rights in said leases and contracts as are now owned, held, or reserved by the State of Ohio; but not to affect any right to the use of the water of said river now owned and held by the lessees of any water right under any lease or contract with the State of Ohio. And the United States hereby assumes control of said river, subject to the paramount interest of navigation. The provisions of this act, so far as they relate to the Muskingum River, shall not take effect, nor shall the money hereby appropriated be available, until the State of Ohio, acting by its duly authorized agent, turns over to the United States all property ceded by the act of the general assembly aforesaid, and all personal property belonging to the improvement aforesaid, and used in its care and improvement, and any balance of money appropriated by said State for the improvement of said river, and which is not expended on the fifteenth day of July, eighteen hundred and eighty-six.

To take ef-
fect when prop-
erty is turned
over.

Clinton Riv-
er.

Improving Clinton River, Michigan: Continuing improvement, six thousand dollars.

Detroit Riv-
er.

Improving Detroit River, Michigan: Continuing improvement, thirty-seven thousand five hundred dollars.

St. Clair
Flats Canal.

Improving Saint Clair Ship-Canal, Michigan: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

St. Marys
River.

Improving Saint Mary's River, Michigan: Continuing improvement by a new lock and approaches, two hundred and fifty thousand dollars.

Hay Lake
channel.

Improving Hay Lake Channel, Michigan: Continuing improvement, one hundred and fifty thousand dollars.

Saginaw
River.

Improving Saginaw River, Michigan: Continuing improvement, thirty-three thousand seven hundred and fifty

dollars; of which sixteen thousand eight hundred and seventy-five dollars are to be used above Bay City, and five thousand dollars in improving the west channel along West Bay City.

The Secretary of War is authorized and directed to appoint a Board of three engineers from the United States Army whose duty it shall be to examine, in all their relations to commerce, the two improved water-ways known as the Portage Lake and River Improvement Company Canal and the Lake Superior Ship-Canal Railway and Iron Company Canal, being the improved harbors of refuge and the water communication across Keweenaw Point, from Keweenaw Bay to Lake Superior, by way of Portage River and Lake, in the State of Michigan, with a view to making the same a free passage-way and harbors of refuge, to consider their value and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement. The said board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon; and ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose.

Improving Chippewa River, Wisconsin: Continuing improvement from Dalles Dam to its mouth, eighteen thousand seven hundred and fifty dollars.

Improving Fox River, Wisconsin: Continuing improvement below Montello, on the approved plan, fifty-six thousand two hundred and fifty dollars. And the Secretary of War is hereby directed to have the examination and survey of the Wisconsin River from Portage to the mouth, now being made by a board of engineers, completed as soon as practicable, and a report thereof made on or before the meeting of the next session of Congress. And the sum of six thousand dollars of the above appropriation, or so much thereof as may be necessary, may be expended at or near Portage City to prevent the overflow of the Wisconsin River into the Upper Fox River, so as to prevent injury to the Government works on Fox River; and this expenditure may be made separately, or, if deemed more economical by the Secretary of War, in adding to any protecting works which may be made by the State of Wisconsin.

Improving Saint Croix River, Wisconsin and Minnesota: Continuing improvement, seven thousand five hundred dollars.

Improving Wabash River, Indiana and Illinois: Continuing work on lock and dams at Grand Rapids, and on the river from Grand Rapids, to its mouth, sixty thousand dollars, and nine thousand dollars to be expended on the river at Grayville [^a].

Board of Engineers to report on value, etc., of Portage Lake and River Improvement Co.'s canal, and Lake Superior Ship Canal, Railway and Iron Company's canal.

Vol. 26, pp. 163, 435.
Post, pp. 543, 557.

Chippewa River.

Fox River.

Survey to be completed as soon as practicable.

Vol. 25, p. 418.
Post, p. 508.

St. Croix River.

Wabash River.

^a This paragraph appropriates only \$60,000.

- White River. Improving White River, Indiana: Continuing improvement, below Hazleton, seven thousand five hundred dollars.
- Calumet River. Improving Calumet River, Illinois: Continuing improvement, thirty thousand dollars; of which eleven thousand two hundred and fifty dollars are to be used between the Forks and one half mile east of Hammond, Indiana, five thousand six hundred and twenty-five dollars of which are to be used in dredging the river between the Forks and the State line of Illinois and Indiana, and five thousand six hundred and twenty-five dollars on the river at Hammond, Indiana: *Provided, however,* That no part of said sum, nor any sum heretofore appropriated, except the said eleven thousand two hundred and fifty dollars, for the river above the Forks shall be expended until the entire right of way, as set forth in Senate Executive Document Number Nine, second session Forty-seventh Congress, shall have been conveyed to the United States free of expense, and the United States shall be fully released from all liability for damages to adjacent property-owners, to the satisfaction of the Secretary of War; and if any of the owners of real estate required to be taken or that is damaged for the purpose of straightening or widening that portion of the Calumet River for which the appropriation herein is now made, cannot be induced to convey to the United States such real estate so required, and release their claim for damages caused by said improvement, or should the owner or owners be incapable of conveying and releasing, or should his or her name or residence be unknown, or he or she be a non-resident of the State of Illinois, it shall then be the duty of the United States attorney for the northern district of Illinois to immediately file a petition in any court having jurisdiction thereof, in the manner and as authorized by the laws of the State of Illinois in such cases, for the purpose of ascertaining the just compensation to be paid the respective owners of the land taken or damaged: *Provided, however,* That the other owners of property and parties interested in said improvement shall first execute a bond to the United States, to be approved by the Secretary of War, for the payment of the costs of such proceedings, and to pay any judgment that may be rendered therein; and on failure to do so the proceedings shall be dismissed.
- Right of way to be first secured.
- Condemnation proceedings.
- Illinois River. Improving Illinois River, Illinois: Continuing improvement, one hundred and twelve thousand five hundred dollars; of which sum three thousand seven hundred and fifty dollars may be expended in dredging the river in front of Peoria.
- Board of Engineers to report on value, etc., of Hennepin Canal, etc.
- The Secretary of War is authorized and directed to appoint a Board of three engineers from the United States Army whose duty it shall be to examine, in all their relations to commerce, the Illinois and Michigan Canal, and

the proposed Hennepin Canal [^a], to consider their value and all other matters connected with their usefulness to navigation, and shall report upon the acquisition and improvement of the Illinois and Michigan Canal and the construction of the Hennepin Canal. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon; and fifteen thousand dollars, or so much thereof as may be necessary, is hereby appropriated for this purpose: *Provided*: That nothing in this paragraph shall be construed as committing the Government to the said improvement.

Proviso.

Improving Gasconda River, Missouri: Continuing improvement, seven thousand five hundred dollars.

Gasconade River.

Improving Osage River, Missouri: Continuing improvement by snagging and removing obstructions, ten thousand dollars.

Osage River.

Improving Red River of the North, Minnesota: Continuing improvement from Breckinridge to the northern boundary-line of the United States, including dredging, removal of snags and bowlders, and construction of wing-dams, and so forth; and the money heretofore appropriated for locks and dams is hereby made available for this purpose.

Red River of the North.

Improving Yellowstone River between Glendive and the mouth, Montana: Continuing the improvement, eighteen thousand seven hundred and fifty dollars.

Yellowstone River.

Improving Mokelumne River, California, by removing obstructions, two thousand five hundred dollars.

Mokelumne River.

Improving Sacramento and Feather Rivers, California, forty thousand dollars of the money heretofore appropriated for improving said rivers that may remain unexpended at the end of the present fiscal year, for snagging and dredging operations and the cost of the proceedings hereinafter authorized, also ten thousand dollars to complete dredges authorized by act of July fifth, eighteen hundred and eighty-four; the balance of said unexpended money not to be used until the Secretary of War be satisfied that hydraulic mining hurtful to navigation has ceased on said rivers and their tributaries. If he be not so satisfied, he is hereby instructed to institute such legal proceedings as may be necessary to prevent the washing, sluicing, dumping, or discharging detritus, debris, or slickens, caused by or arising from such hydraulic mining, into either of said rivers or any of its tributaries, or into the San Joaquin River or any of its tributaries, or in or to such place or situation from which such detritus, debris, or slickens may be liable to be washed or carried by storms or floods into either of said rivers or tributaries; and he is hereby instructed to use out of said sum as much as may be necessary for said purpose.

Sacramento and Feather rivers.
Vol. 26, p. 668.
Post, p. 540.

Secretary of War to be satisfied that injurious hydraulic mining has ceased.

Legal proceedings to prevent.

^a Now known as the Illinois and Mississippi Canal.

San Joaquin River; Stockton and Mormon sloughs.

Improving San Joaquin River and Stockton and Mormon Sloughs, California: Continuing improvement, eighteen thousand seven hundred and fifty dollars.

Canal at Cascades, Oreg.

Improving canal at the Cascades, Oregon: Continuing improvement, one hundred and eighty-seven thousand five hundred dollars.

Columbia River.

Improving the Upper Columbia River, including Snake River, Oregon and Washington Territory: Continuing improvement, ten thousand dollars.

Improving the mouth of the Columbia River, Oregon, one hundred and eighty-seven thousand five hundred dollars.

Willamette and Columbia rivers.

Improving Lower Willamette River, and Columbia River below Portland, Oregon: Continuing improvement, seventy-five thousand dollars; of which sum twenty one thousand dollars for a snag boat to be used on the Willamette and Columbia Rivers, and five thousand dollars to be expended on the river in front of Portland.

Snag boat.

Willamette River above Portland.

Improving the Upper Willamette River above Portland, Oregon: Continuing improvement, ten thousand dollars.

Coquille River.

Improving Coquille River, Oregon: Continuing improvement, twenty thousand dollars.

Chehalis River.

Improving Chehalis River, Washington Territory: Continuing improvement, two thousand five hundred dollars.

Cowlitz River.

Improving Cowlitz River, Washington Territory: Continuing improvement, two thousand dollars.

Skagit, Stilaquamish, Nooksak, Snohomish, and Snoqualmie rivers.

Improving Skagit, Steilaquamish, Nootsack, Snohomish, and Snoqualmie Rivers, Washington Territory: Continuing improvement, ten thousand dollars.

Missouri River.

Improving Missouri River from its mouth to Sioux City: Continuing improvement, including necessary work at Omaha, Atchison, Saint Joseph, Fort Leavenworth Reservation, Arrow Rock, Kansas City, Plattsmouth, Brownsville, and Nebraska City, three hundred and seventy-five thousand dollars; to be expended under the direction of the Secretary of War, in accordance with plans and estimates to be furnished by the Missouri River Commission.

From Sioux City to Fort Benton.

Improving Missouri River from Sioux City to Fort Benton: Continuing improvement, sixty thousand dollars, under the direction of the Secretary of War.

Removing obstructions.

For removing obstructions in the Missouri River, twenty-two thousand five hundred dollars.

Ohio River.

Improving the Ohio River: Continuing improvement, three hundred and seventy-five thousand dollars; out of which sum thirty-seven thousand five hundred dollars are to be expended at Grand Chain in removing rocks and other obstructions to navigation at that locality; also eighteen thousand seven hundred and fifty dollars may be expended in constructing or aiding in the construction of such an embankment on the south side of the

Great Miami River, near its junction with the Ohio, as may be necessary to confine the waters of the Great Miami in great floods to the general course of its channel at or near the Ohio, to the end that the formation of the bar in the Ohio River now forming and obstructing navigation may be arrested; also thirty-seven thousand five hundred dollars, or so much thereof as may be necessary, of said appropriation shall be expended in constructing five ice-piers, pursuant to the present or prospective plans of the Chief of Engineers, at or near the following places, to wit: One at Pomeroy, Ohio; one at Middleport, Ohio; one at Gallipolis, Ohio; and one at Iron-ton, Ohio; and one at or near Ashland, Kentucky, on the south side of the Ohio River: *Provided*, That the Secretary of War is hereby authorized and directed to obtain, if he can do so without cost to the United States, perpetual leases or conveyances of the riparian rights of the property-owners at each of said localities, in the event said ice-piers, or any one of them, shall be located where there is no improved landing-place: *And provided further*, That at localities where there are improved landings he shall first obtain a relinquishment of wharfage rights and dues in favor of water-craft seeking protection from damage by ice; and no part of this appropriation shall be used for such purpose until the foregoing conditions are complied with. Also, out of said appropriation for the Ohio River eighteen thousand seven hundred and fifty dollars for removing obstruction at the mouth of Licking River; also eleven thousand two hundred and fifty dollars for completing ice-harbor at Four-Mile Bar, near Cincinnati; also twenty thousand dollars, or so much thereof as may be necessary, for Davis Island Dam.

Ice piers.

Provisos.

Riparian rights.

Relinquishment of wharfage rights.

For continuing operations upon the reservoirs at the headwaters of the Mississippi River, thirty-seven thousand five hundred dollars: *Provided*, That in the opinion of the Chief of Engineers the expenditure of this appropriation and the ultimate completion of this part of the reservoir system will adequately improve navigation.

Mississippi River reservoirs. *Proviso.*

For operating snag-boat on Upper Mississippi River, twenty-two thousand five hundred dollars.

Upper Mississippi River.

Improving Mississippi River from Saint Paul to Des Moines Rapids: Continuing improvement, three hundred and eighty-two thousand five hundred dollars; of which sum six thousand dollars or so much thereof as may be necessary, shall be applied to the removal of the rock at Duck Creek Chain, at the Rock Island Rapids; and of which sum the further amount of fifteen thousand dollars, or so much thereof as may be necessary, may be used by the Secretary of War, in his discretion, for continuing the practical test of the flume invented by M. J. Adams, the said test to be made under the supervision and direction of said Adams; but if not so used the sum shall remain as a part of said appropriation, and be used for the purposes first in this paragraph specified.

Mississippi River from St. Paul to Des Moines Rapids.

Test of flume.

Mississippi River at Des Moines Rapids Canal.	Improving Mississippi River at Des Moines Rapids Canal, under the modified project, twenty-six thousand two hundred and fifty dollars; of which sum fifteen thousand dollars are to be used for pier construction, in extending the outer wall of canal to the pivot-pier of the bridge.
Dry dock.	For dry-dock at Des Moines Rapids, forty-eight thousand seven hundred and fifty dollars.
Ice harbor, Dubuque.	Improving ice-harbor at Dubuque, Iowa, the unexpended balance, or so much thereof as shall be necessary, shall be applied to paving instead of riprapping said ice-harbor.
From Des Moines Rapids to Illinois River.	Improving Mississippi River from Des Moines Rapids to the mouth of the Illinois River, including the river at Quincy Bay and the removal of the bars at the mouth of Whipple Creek and Hamburg Bay, including also the strengthening of Sny Island Levee where it crosses Snicarte Slough and other sloughs: Continuing the improvement, one hundred and fifty thousand dollars.
From Illinois River to Ohio River.	Improving Mississippi River from the mouth of the Illinois River to the mouth of the Ohio River, including the completion of the work at Alton, and, at the discretion of the Secretary of War, the protection of the Illinois shore opposite the mouth of the Missouri River: Continuing improvement, three hundred and seventy-five thousand dollars; of which thirty-seven thousand five hundred dollars, or so much thereof as may be necessary, to be expended in extending the work for the protection of the eastwardly bank of the Mississippi River at Cairo, and the prevention of its wash or erosion, commencing at the southerly end of the present Government revetment work and continuing down stream, and twenty-two thousand five hundred dollars for continuing improvement at Cape Girardeau, Missouri, and Montana Point, Illinois: <i>Provided</i> , That the Secretary of War, in his discretion may use not to exceed seventy-five thousand dollars of said sum of three hundred and seventy-five thousand dollars to correct the current of the river and improve the channel at Saint Louis.
From Head of Passes to Ohio River.	Improving Mississippi River from Head of the Passes to the mouth of the Ohio River: Continuing improvement, two million dollars; which sum shall be expended under the direction of the Secretary of War, in accordance with the plans, specifications, and recommendations of the Mississippi River Commission: <i>Provided</i> , That no portion of this appropriation shall be expended to repair or build levees for the purpose of reclaiming lands or preventing injury to lands or private property by overflows: <i>Provided, however</i> , That the Commission is authorized to repair and build levees if, in their judgment, it should be done as part of their plan to afford ease and safety to the navigation and commerce of the river and to deepen the channel: <i>And provided further</i> , That no
Provisos.	
Levees.	

works of bank protection or revetment shall be executed in said reaches or elsewhere until after it shall be found that the completion of the permeable contracting works and uniform width of the high-water channel will not secure the desired stability of the river banks: *Provided, however,* That nothing herein contained shall prevent the construction of revetment works where the banks are caving at Greenville Reach, Delta Point, in front of the cities of Vicksburg, Memphis, Hickman, and Columbus: *And provided further,* That contraction works shall be built at the same time in the wide portions of the river immediately above the said revetment works. Of the amount herein appropriated for the Lower Mississippi, seventy-five thousand dollars are to be expended in continuing the work in progress at New Orleans; one hundred and eighty-seven thousand five hundred dollars for the rectification of the Red and Atchafalaya Rivers by preventing further enlargement of the latter stream and restricting its outlet capacity, and for keeping open a navigable channel through the mouth of Red or Old River into the Mississippi; thirty-seven thousand five hundred dollars in improving navigation in the Greenville Reach, by preventing the bank at Greenville from further caving; seventy-five thousand dollars in deepening the channel at Vicksburg by dredging through the bar existing there; but this last-named sum shall not be expended unless after another examination or survey the Commission shall deem it advisable; and if they shall not, then thirty-seven thousand five hundred dollars shall be expended in the improvement of navigation at Vicksburg by constructing suitable dikes and other appropriate works, and fifty-six thousand two hundred and fifty dollars in completing the work on the river at Memphis; also eighteen thousand seven hundred and fifty dollars for work on the river at Hickman, and eighteen thousand seven hundred and fifty dollars for work on the river at Columbus, Kentucky.

For examinations and surveys at South Pass, of the Mississippi River, pursuant to the act of March third, eighteen hundred and seventy-five, ten thousand dollars.

South Pass.
Examinations and surveys.

For survey of the Mississippi River from the Head of the Passes to its headwaters: Continuing survey, thirty thousand dollars.

Survey from
Head of Passes
to headwaters.

For gauging the waters of the Lower Mississippi River and its tributaries, as provided for in joint resolution of the twenty-first of February, eighteen hundred and seventy-one, five thousand dollars.

Gauging.

For continuing the removal of snags, wrecks, and other obstructions in the Mississippi River, fifty-six thousand two hundred and fifty dollars.

Removal of
snags, etc.

For gauging the waters in the Columbia River, one thousand dollars,

Columbia
River, gauging.

Harbor lines
to be estab-
lished.

Vol. 25, p.
425. *Post*, p.
518. Vol. 28,
p. 455. *Post*,
p. 584. Vol.
28, p. 364.
Post, p. 713.
Vol. p. 30,
1151. *Post*, p.
887.

New York
Harbor.

Prohibiting
deposits in.

Vols. 25, p.
209; 28, p.
360; 30, p.
1155; 32, p.
375.

Post, p. p.
481, 709, 893,
1010.

Proviso.

Not to pre-
vent improve-
ments.

SEC. 2. That in places where harbor lines have not been established, and where deposits of débris of mines or stamp works can be made without injury to navigation, within lines to be established by the Secretary of War, said officer may, and is hereby authorized to, cause such lines to be established: and within such lines such deposits may be made, under regulations to be from time to time prescribed by him^a.

SEC. 3. It shall not be lawful to cast, throw, empty, or unlade, or cause, suffer, or procure to be cast, thrown emptied, or unladen, either from or out of any ship, vessel, lighter, barge, boat, or other craft, or from the shore, pier, wharf, or mills of any kind whatever, any ballast, stone, slate, gravel, earth, slack, rubbish, wreck, filth, slabs, edgings, sawdust, slag, or cinders, or other refuse or mill-waste of any kind, into New York Harbor: *Provided*, That nothing herein contained shall extend, or be construed to extend, to the casting out, unlading, or throwing out of any ship or vessel, lighter, barge, boat, or other craft, any stones, rocks, bricks, lime, or other materials used, or to be used, in or toward the building, repairing, or keeping in repair, any quay, pier, wharf, weir, bridge, building, or other work lawfully erected or to be erected on the banks or sides of said harbor, or to the casting out unloading or depositing of any material excavated for the improvement of navigable waters, into such places and in such manner as may be deemed by the United States officer supervising the improvement of said harbor most judicious and practicable and for the best interests of such improvement.

Regulations,
etc., to be pre-
scribed by Sec-
retary of War
to secure econ-
omical expend-
iture of appro-
priation, etc.

SEC. 4. The Secretary of War shall prescribe such rules and regulations as may be necessary to secure a judicious and economical expenditure of the money herein appropriated, and shall cause to be made and submitted to Congress annual reports, together with maps and plans, including the report of the Mississippi River Commission, on or before December first, giving detailed statements of the work done, contracts made, the expenditures thereunder or otherwise, and balances of money on hand up to November first, and the effect of such work, together with such recommendations as he may deem proper. He shall, at the same time, report to Congress all cases in which piers, breakwaters, locks, and dams, or other structures or works built or made by the United States in aid of commerce or navigation are used, occupied, or injured by a corporation or an individual, and the extent and mode of such use, occupation, or injury. He shall report, at the same time, whether any bridges, causeways, or structures now erected or in process of erection do or will interfere with free and safe navigation.

Vol. 30, p.
1152. *Post*, p. 888.

Vol. 30, pp.
1151, 1153,
1154. *Post*, p. p.
886, 887, 889-
892.

^a This section is amended by the river and harbor acts of Aug. 11, 1888 (sec. 12), Sept. 19, 1890 (sec. 12), Aug. 18, 1894 (sec. 9), and Mar. 3, 1899 (sec. 11).

SEC. 5. It shall be the duty of the Secretary of War to apply the money herein appropriated for improvements other than surveys and estimates, in carrying on the various works, by contracts or otherwise, as may be most economical and advantageous to the Government. Where said works are done by contract, such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution and completion of the work according to such contract, and for the prompt payment of all liabilities incurred in the prosecution thereof for labor and material.

Work to be done by contract or otherwise.

Contracts.

SEC. 6. The Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, to be made, and the cost of improvements to be estimated, at the following localities, to wit:

Examinations and surveys.

In the States of—

ARKANSAS.

Arkansas.

Re-examination of Little River.

The lakes connecting with Red River, between Shreveport, Louisiana, and Fulton, Arkansas.^[a]

Re-examination of Ouachita above Camden, Arkansas.

Saline River.^[b]

Cache River.

CALIFORNIA.

California.

San Pedro Bay near the entrance to Wilmington Harbor, with a view to establishing an outer harbor for the protection of deep-draught vessels.

Mouth of Smith's River.

Crescent City Harbor, with a view to a sea-wall from Battery Point to Flat Rock.

CONNECTICUT.

Connecticut.

Five-Mile River Harbor.

Resurvey of Duck Island Harbor, on Long Island Sound, including plans, specifications, and estimate of cost for making the same a harbor of refuge.

DAKOTA TERRITORY.

Dakota.

James River.

^a The following-named streams were among those considered in the report upon this item, viz: Cypress Bayou, Soda Lakes, Clear Lake, Black Bayou (which empties into Clear Lake), Red Bayou (the one about 6 miles above Gilmer), Black Lake (known also as Cypress Brake), and Kelley Bayou.

^b A tributary of Ouachita River.

Delaware.

DELAWARE.

Duck Creek [Smyrna River].

Florida.

FLORIDA.

Punta Rassa Harbor.
Resurvey of Tampa Bay, including Hillsborough River up to the city of Tampa.
Resurvey of outer and inner bars at Pensacola.
Charlotte Harbor, including San Carlos Bay.
Clear Water Harbor, including Anclote and Saint Joseph's Bays and the Narrows into Boga Ciega Bay.
Wakulla River from its mouth to Wakulla Springs.
Survey of the channel from Haul-over, on Indian River, to Gilbert's Bar.
Saint Augustine, for a deep-sea channel on the outer bar.

Georgia.

GEORGIA.

Savannah River from cross-tides above Savannah to the bar, with a view to obtaining twenty-eight feet of water in the channel.

Flint River from Montezuma to Old Agency.
From Doboy Island to Doboy Bar. [^a]
Jekyl Creek.

Illinois.

ILLINOIS.

Farm Creek, with a view to changing its course.
Kaskaskia River from New Athens to mouth.
Bars in Hamburg Bay.
Calumet River from the forks of the river near its entrance into Lake Calumet to Riverdale; also Calumet River from Riverdale to Blue Island.
Mississippi River at Rush Island Bend and Ivy Landing, with a view to confining and deepening the channel.

Indiana.

INDIANA.

For a survey of the Ohio River, near the city of Evansville, Indiana, with a view to determine what, if anything, will be necessary to prevent a change of the channel of the river in front of that city.

Kentucky.

KENTUCKY.

Pond River.

The Secretary of War is directed to report to the next session of Congress whether or not the Government dry-dock at the Louisville and Portland Canal is adequate for

^a Doboy Island is at the mouth of Darien River, and is separated from Doboy Sound by Commodore Island. Doboy bar is in the ocean, opposite to the entrance to Doboy Sound.

the purposes of commerce, and what alterations, if any, are necessary, and the cost of making the same.

Licking River, from Farmer's to West Liberty.

Salt River.

For ice-harbor at Paducah, Kentucky.

The bar at the mouth of Limestone Creek, in the harbor of Maysville.

LOUISIANA.

Louisiana.

Little River [^a].

Bayou Rouge.

Dugdemonia River.

Mouth of Bayou Plaquemine, with a view to its connection with the Mississippi River by locks; also Bayou Plaquemine and other connecting streams, to form the best route to Grand Lake.

Bague [Bogue] Falia from present landing to Covington.

Calcasieu Pass, the two bars obstructing the navigation thereof.

Mouth of Calcasieu River, the bar obstructing its mouth.

Bayou Terrebonne from Houma to Thibodeaux.

Bayou Teche from Saint Martinsville to Fort Barre.

Mouth of Bayou La Fourche, with a view to the construction of a lock and dam; Clear Lake, Black Bayou, Red Bayou, Black Lake, and Kelley Bayou, to reopen navigable communication between those streams and Red River; Bayou La Fourche, to secure navigation at low water.

Cornay River.

Ouchita River from Camden to mouth, with a slack-water navigation.

Bayou Vermillion, to secure navigation from Abbeville to the railroad bridge of the Louisiana and Texas Railroad.

Bayou Rondeway.

Cypress Bayou.

Bayou Vidal.

MAINE.

Maine.

Bayoduce [Bagaduce] River between the towns of Penobscot and Brooksville.

Big Rapids of Saint John's River.

Camden Harbor.

Rockport Harbor.

Kennebec River at Bath, and from Augusta to lower end of Perkin's Island.

Saint George's River [^b] from Warren to Thomaston.

^a The report on this item had reference to the river of this name that empties into Black River.

^b Known also as Georges River.

Matinicus Isle, with a view to a harbor of refuge.
 Penobscot River from Bangor to Bucksport Narrows.
 Saint Croix River from Ferry Point Bridge, at Calais,
 to Breakwater Ledge.

Bar Harbor, Maine, with the view to establishing a
 breakwater and deepening the waters of said harbor, and
 especially the channel between Rodick's Island and
 Mount Desert Island.

Maryland.

MARYLAND.

Cambridge Harbor.

Fairlee Creek.

Patuxent River from Benedict to Hills Landing.

For widening the channel of Baltimore Harbor to six
 hundred feet.

Massachu-
setts.

MASSACHUSETTS.

Manchester Harbor.

Duxbury Harbor.

Wellfleet Harbor.

Falmouth Harbor of Refuge.

Vineyard Haven Harbor.

Cottage City Harbor.

Menemsha Harbor of Refuge.

Taunton River.

Winthrop Harbor.

New Bedford Harbor.

Michigan.

MICHIGAN.

Bar in Saint Clair River opposite Saint Clair City.

Grand River.

North River between Essex and North Bridges [^a].

Biddle's Point to Mackinac Harbor, with a view to a
 breakwater.

Harbor at Forestville, Lake Huron.

Pigeon River.

Mouth of Black River, Saint Clair County.

Carp River at Leland, with a view to affording an en-
 trance to Carp Lake for harbor of refuge.

Lake Michigan at Empire, with a view to cutting a
 channel across the bar from Lake Michigan to Bar Lake.

Grand Traverse Bay, with a view to connecting it with
 Torch Lake, near Eastport.

Pinepog River.

Rouge River at its junction with Detroit River, and up
 the river to bridge of Saint Louis and Wabash Railroad.

Torch Lake Channel, Lake Superior.

Minnesota.

MINNESOTA.

Red River of the North from Moorhead to Fergus
 Falls.

Red Lake River from Grand Forks to Red Lake.

^a This locality could not be found.

Mississippi River between Saint Paul and Saint Anthony's Falls.

Minnesota River with a view to its improvement by locks and dams.

MISSISSIPPI.

Mississippi.

Tombigbee River, to ascertain what improvement is necessary to make said river continuously navigable from Vienna, Alabama, to Walker's Bridge, Mississippi.

Cassity [Cassidy] Bayou.

Noxubee River, to ascertain whether it can be made continuously navigable by a system of locks and dams, or otherwise.

Bear Creek [^a].

MISSOURI.

Missouri.

Resurvey of the Osage River from its mouth to Osceola, with a view to movable locks and dams, or other methods of improvement.

Little River from Hornersville to its junction with the Saint Francis River.

Saint Francis River from Greenville to the Arkansas State line.

NEW HAMPSHIRE.

New Hampshire.

Bellamy River.

NORTH CAROLINA.

North Carolina.

Alligator River.

Lockwood's Folly River.

Lumber River.

Yadkin River from South Carolina line to the Narrows.

Catawba River.

NEW JERSEY.

New Jersey.

Thoroughfare running back of the ocean from Cape May to the Great Bay north of Atlantic City.

Channel back of Brigantine Beach, between Absecon and Brigantine Inlets.

NEW YORK.

New York.

Channel between Jamaica Bay and Rockaway Inlet.

The East River with a view to the removal of a ledge of rocks situated between five and six hundred feet from the foot of Tenth and Eleventh streets in the city of New York.

Spring Creek.

Waddington Harbor.

Mouth of Patchogue River.

Hudson River between New Baltimore and Coxsackie.

Peter's Neck Bay.

^aA tributary of Tennessee River.

Tonawanda Harbor and Niagara River between Black Rock and Tonawanda, with a view to a sixteen-foot channel.

Glen Cove Harbor.

Oregon.

OREGON.

Wood River.

Link River.

Suislaw River and Bar.

Coquille River between Coquille City and Myrtle Point.

Nehalem Bay and Bar.

Tillamook Bay and Bar.

Umpqua River.

Ohio.

OHIO.

Sandusky Harbor, with a view to a straight channel from the north end of Cedar Point to the east end of the existing channel in front of the city.

Big Hockhocking River [^a] from its mouth to Coolville.

Chagrin River at its mouth.

Pennsylvania.

PENNSYLVANIA.

Darby Creek.

Rhode Island.

RHODE ISLAND.

Little Narragansett Bay, entrance to the wharves at Watch Hill.

South Carolina.

SOUTH CAROLINA.

Mosquito Creek between the South Edisto and Ashepoo Rivers, with a view to connect the South Edisto with the Ashepoo at or near Fenwick's Island.

Mingo Creek.

Clark's Creek.

Little Pee Dee River.

Alligator River and other waters connecting Santee River and Bull's Bay.

Tennessee.

TENNESSEE.

North Fork of the Forked Deer River below Dyersburg.

Obeils [Obey] River from the point where improvements have heretofore been made to the mouth of the West Fork.

Texas.

TEXAS.

Cedar Bayou, where it empties into Galveston Bay.

^a Usually called Hocking River.

VIRGINIA.

Virginia.

Mattox Creek.

Nansemond River.

Louisa [Levisa] Fork of [Big] Sandy River.

Roanoke River from Clarkesville, Virginia, to Eaton Falls, North Carolina.

Hunters Creek [a].

WEST VIRGINIA.

West Vir-
ginia.

Meadow River.

Gauley River.

Coal River.

WISCONSIN.

Wisconsin.

Harbor at Hudson, Lake Saint Croix.

Examination and report on the causes of the extraordinary overflows of the Chippewa River, and what means, if any, can be adopted to prevent their recurrence.

Examina-
tions, survey,
etc., not spe-
cially provided
for.

SEC. 7. For examinations, surveys, and contingencies, and for incidental repairs, for which there is no special appropriation, for rivers and harbors, one hundred thousand dollars: *Provided*, That no surveys shall be made of any harbors or rivers until the Chief of Engineers shall have directed a preliminary examination of the same by the local engineer in charge of the district, or an engineer detailed for the purpose; and such local or detailed engineer shall report to said Chief of Engineers, whether, in his opinion, said harbor or river is worthy of improvement, and shall state in such report fully and particularly the facts and reasons on which he bases such opinion, including the present and prospective demands of commerce; and it shall be the duty of the Chief of Engineers to direct the making of such survey if, in his opinion, the harbor or river proposed to be surveyed be worthy of improvement by the General Government; and he shall report to the Secretary of War the facts, and what public necessity or convenience may be subserved thereby, together with the full reports of the local engineer. Said reports of preliminary examinations and surveys shall be made to the House of Representatives, and are hereby ordered to be printed when so made.

Proviso.

Preliminary
examinations
to be made be-
fore surveys.

SEC. 8. That the Secretary of War shall report to Congress, at its next and each succeeding session thereof, the name and place of residence of each civilian engineer employed in the work of improving rivers and harbors by means and as the result of appropriations made in this and succeeding river and harbor appropriation bills, the time so employed, the compensation paid, and the place at and work on which employed.

Reports to be
made to House
of Representa-
tives and
printed.

Names of
civilian engi-
neers to be re-
ported to Con-
gress, etc.

Approved, August 5, 1886.

^a Location could not be found.

Aug. 5, 1886.
Vol. 24, p. 335.

CHAP. 930.—An Act To provide for protecting the interests of the United States in the Potomac River flats, in the District of Columbia.

Potomac
River flats, D.
C.

Suit to be
brought to es-
tablish title,
etc., in land
affected by im-
provement.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be the duty of the Attorney-General of the United States to institute, as soon as may be, in the supreme court of the District of Columbia, a suit against all persons and corporations who may have or pretend to have any right, title, claim, or interest in any part of the land or water in the District of Columbia within the limits of the city of Washington, or exterior to said limits and in front thereof toward the channel of the Potomac River, and composing any part of the land or water affected by the improvements of the Potomac River or its flats in charge of the Secretary of War, for the purpose of establishing and making clear the right of the United States thereto.

* * * * *

No money to
be spent on
property in dis-
pute until final
decision.

SEC. 6. That until the final decision of the matters hereinbefore in this act mentioned shall have been had, no moneys appropriated for the improvement of the Potomac River within the District of Columbia, the establishment of harbor-lines in the District of Columbia, and the raising of the flats therein shall be expended otherwise than upon property in respect of which there is no claim adverse to the title of the United States or for the improvement of navigation in the said river.

Approved, August 5, 1886.

Feb. 28, 1887.
Vol. 24, p. 429.

CHAP. 277.—An Act Granting to the Kanawha and Ohio Railroad Company the right to lay its track through United States lock and dam property in the Great Kanawha Valley, State of West Virginia.

Right of way
to Kanawha
and Ohio R. R.
Co. through
Government
property on
Kanawha
River, W. Va.

Location.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Kanawha and Ohio Railroad Company is hereby authorized to maintain and use its track through the United States property at lock and dam number six on the north side of the Great Kanawha River, in Kanawha County, West Virginia, and to use for a right of way through said property a section of land fifty-four feet wide and bounded and described as follows, to wit: Beginning at a point in the lower line of the United States lot one hundred and sixty-three feet from the corner stone marking the lower or western end of the line to said lot along the public road, running thence north sixty-six degrees east six hundred feet through the said lot to a point in the upper line thereof; thence with said upper line south twenty-four degrees thirty minutes east, crossing the center line of the said railroad at twenty-seven feet, in all fifty-four feet: thence south sixty-six

degrees west six hundred feet through the said lot to a point in the lower line thereof; thence with the lower line of said lot north twenty-four degrees thirty minutes west, crossing the center line of the said railroad at twenty-seven feet, in all, fifty-four feet, to the place of beginning, containing about three-fourths of an acre. And the privilege is also hereby granted to said company of hereafter laying, maintaining, and using a track through the United States property on the north bank of said river at lock and dam number four, and at lock and dam number three, and at lock and dam number two, in said county, subject however, to the antecedent written consent and approval of the Secretary of War as to location, construction, and width of right of way: *Provided*, That said Kanawha and Ohio Railroad Company, its successors and assigns, shall if the Secretary of War in his discretion require it, pay a reasonable yearly rental for said property, the amount thereof to be ascertained and prescribed by the Secretary of War: *Provided, however*, That the said company shall construct and maintain, at its own cost, all such wagon-crossings, cattle-guards, and fences over and along the line of its road through the said Government property, at all of the four lock and dam sites mentioned in this act, as may be required by the Secretary of War: *Provided further*, That the said company shall take up and remove its track or tracks from the said property, or any part thereof, at either or all of the four sites mentioned, whenever thereto directed by the Secretary of War; and such removal shall not be made the foundation for any claim for damages against the United States: *And provided further*, That the right to repeal, alter, or amend this act is reserved to Congress.

Provisos.

Rental.

Crossings.

Removal of tracks when required.

Approved February 28, 1887.

CHAP. 4.—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-seven, and for prior years, and for other purposes.

Feb. 1, 1888.

Vol. 25, p. 4.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, to supply deficiencies in the appropriations for the fiscal year eighteen hundred and eighty-seven, and for other objects hereinafter stated, namely:

Deficiencies appropriation, 1887.

* * * * *

To pay D. M. and C. P. Dull the amount ascertained by the Secretary of War to be due them for work done on the Great Kanawha River, West Virginia, and by reason of changes in their contract, and so forth, thirty-four

Payment to D. M. and C. P. Dull. Vol. 22, p. 209. Ante, p. 383.

thousand three hundred and seventy-nine dollars and thirty cents.

Payment to
Charles McCafferty.

To pay Charles McCafferty the amount ascertained by the Secretary of War to be due him for work on the Great Kanawha River, West Virginia, and by reason of changes in his contract, and so forth, thirty thousand three hundred and seventy dollars and fifteen cents ^[a]:
Provided, That any contract indebtedness of said McCafferty incurred by subcontract, or for labor or material furnished for the prosecution of the work on which this sum is based, shall be first ascertained and paid by the Secretary of War and the balance paid to said McCafferty. Said amounts shall be received in full satisfaction of all claim under said contract.

Proviso.
Payment of
subcontracts.

* * * * *

FOX AND WISCONSIN RIVERS IMPROVEMENT.

Payment of
judgments on
account of
damages, im-
provement of
Fox and Wis-
consin rivers.

For payment of judgments and awards recovered against the United States for flowage damages caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, and reported to Congress by the Attorney-General in Senate Executive Document Ninety-four, Forty-ninth Congress, second session, as follows:

John Glatz, one hundred twelve dollars and fifty cents;

Andreas Haesly, four hundred and twenty-two dollars;

Rufus Lane, two hundred dollars;

R. C. Ernst, three hundred and twenty-five dollars;

Mary Young, six hundred sixty-two dollars and sixty-six cents;

E. B. Fisk, four hundred fifty-eight dollars and thirty-three cents;

William McLaren, five hundred thirty-six dollars and sixty-six cents;

Frederick Nable, six hundred ninety-eight dollars;

Henry Kuhn, four hundred and fifty dollars;

Eliza A. Clark, three hundred and fifty dollars;

Emily L. Stickney, three hundred dollars;

Henry Kempf, two hundred and fifty dollars;

John Kien, three hundred seventeen dollars and thirty-three cents;

Robert Buckstaff, six hundred and fifty dollars;

Charles Morgan, eight hundred five dollars and eighty-three cents;

Caroline Mitchell, Nellie Mitchell, Mary Blackman, Alice Mitchell, and Emma Mitchell, heirs of Samuel Mitchell, deceased, three hundred forty-one dollars and sixty-six cents;

Sarah P. Locke, six hundred thirty-one dollars and sixty-six cents;

T. A. Rogers, five hundred and eleven dollars;

^a The amount actually paid pursuant to the provisions of this paragraph was \$29,283.84, the balance, \$1,086.31, having been returned to the surplus fund.

N. Naumer, five hundred eighty-two dollars and fifty cents;

Nelson Allen, four hundred sixty-two dollars and fifty cents;

William B. Knapp, six hundred ninety-one dollars and sixty-seven cents;

John Gores, four hundred thirty-six dollars and sixty-six cents;

G. A. Randall, two hundred and eighty dollars;

Charles Kalbus, five hundred sixteen dollars and sixty-six cents;

F. C. Arnold, four hundred and seventy-five dollars;

Balthazar Gallatine, four hundred twenty-six dollars and sixty-six cents;

Charles Rohr, five hundred ninety-one dollars and sixty-six cents;

Carl Derber, four hundred dollars;

George Rogers, two thousand four hundred and forty dollars;

Commodore Rogers, one thousand four hundred and eighty dollars;

Martha E. Roberts, two thousand two hundred thirty-three dollars and thirty-three cents;

D. L. Libbey, two thousand one hundred ninety-six dollars and ninety-six cents;

Henry C. Westphal, three hundred and fifty dollars;

L. C. Porter, three hundred and ten dollars;

John Ryf, one thousand three hundred and seventy-five dollars;

J. E. La Grange, one thousand two hundred and ninety dollars and sixty-six cents;

W. H. Ternouth, four hundred and seventy dollars;

Pauline Schaffer, substituted for August Schaffer, ninety dollars;

Frederick Webber, seventy-five dollars;

Fred. Malchow and John F. Brown, four hundred dollars;

Ferdinand Flester, one hundred and fifty dollars;

Ed. M. Brainerd, seven hundred and twenty-five dollars;

August Beduhn, three hundred eleven dollars and sixty-six cents;

P. C. Callup, four hundred and fifty dollars;

Wilhelmine Naffin, four hundred fifty-three dollars and thirty-three cents;

John R. Wheeler, four hundred forty-three dollars and thirty-three cents;

George M. F. Arnold, three hundred fifty-eight dollars and thirty-three cents;

Hugh Gear, four hundred eighty-three dollars and thirty-three cents;

Mary Dickinson, six hundred and twenty-five dollars;

A. Ackermann, three hundred fifteen dollars and twenty-five cents;

Robert Jaenicke, four hundred sixty-two dollars and fifty cents;

A. Merton, five hundred dollars;

Regina Laescher, two hundred dollars;

Lorenz Kenzel, one hundred and fifty dollars;

John Scheer, one hundred dollars;

Robert Petzhold, five hundred and sixty dollars;

Orson Angell, eight hundred and forty dollars;

Charles E. Angell, two hundred and fifty dollars;

Nelson Shepperd, Catharine Shepperd, and Walter Shepperd, by his guardian ad litem, Nelson Shepperd, three hundred dollars;

Thomas Davis, six hundred and sixteen dollars and sixty-six cents;

Theodore Grubbe, one thousand three hundred dollars;

Francis Weyerhurst, four hundred dollars;

Lucas M. Miller, five thousand three hundred and thirty-two dollars;

Frederick Malchow, one hundred and forty dollars;

Ludwig Malchow, three hundred dollars;

Gottlieb Doehmel, one thousand two hundred and ten dollars;

Eric B. Sternan, six hundred and eighty-two dollars;

Mahala Sturtevant, one thousand dollars;

Charles Robinson, three hundred and forty-four dollars;

Patrick Quilty, one hundred dollars;

G. W. Washburn, nine hundred dollars;

The Island Park Association and Gabe Bouck, one thousand one hundred forty-four dollars and seventy-two cents;

Peter McCourt, three hundred and fifty dollars;

August Porath, four hundred and eighty dollars;

John Winchlag, two hundred and ten dollars;

John Behrand, one hundred dollars;

John Leonard, six hundred and twenty-five dollars;

Mary E. Wright, one thousand three hundred dollars;

William E. Mills, six hundred and sixty dollars;

Ed. L. Matthewson, three thousand nine hundred and forty-five dollars;

George W. Merritt, executor of the last will and testament of Eliza Merritt, deceased, seven hundred and eighty-four dollars;

Sedate D. Paddleford, two thousand four hundred dollars;

John Strum, seven hundred and forty-five dollars;

John Schroeder, seven hundred and forty-four dollars;

Hansuma S. Bangs, as administratrix of the estate of Alexander Bangs, one thousand one hundred and forty dollars;

A. S. Trow, seven hundred and fifty dollars;

George Allanson, substituted for J. D. Harris, one hundred and sixty dollars;

Mary W. Stow, two thousand seven hundred sixty-four dollars and eighty cents;

Benjamin F. Moore, four thousand five hundred forty-two dollars and sixty-one cents;

Heman Hodgkin, two thousand eight hundred fifty-eight dollars and six cents;

Ann White, seven hundred and forty-two dollars;

Joseph Kinsman, four thousand nine hundred sixty-three dollars and ninety-seven cents;

D. D. Trelevan, surviving executor of last will and testament of T. J. Wood, deceased, one thousand four hundred and sixty-six dollars and forty-nine cents;

Richard B. Charles, nine hundred and sixty dollars;

William R. Tallmadge, as executor of the last will and testament of William R. Tallmadge and Sarah J. Tallmadge, deceased, three hundred and twenty dollars;

Gustavus A. Bensom, and Henry A. Geisse, trustees of the estate of F. William Geisse, five hundred and twenty-four dollars;

James Whitton, six hundred and eighty-two dollars;

Dennis Ryan, three hundred and eighteen dollars;

Nicholas Krebsbach, four hundred seventeen dollars and ninety cents;

Peter Krebsbach, four hundred seventeen dollars and ninety cents;

Mirton F. Mosher, as administrator of the estate of Jeremiah Mosher, deceased, one thousand four hundred seventy-seven dollars and fifty-two cents;

L. H. Bishop, Luke W. Bishop, Lucerne Bishop, Lucretia Bishop, Louisa M. Bishop, and Lafayette Bishop, eight hundred and fifty-seven dollars;

James A. Fisher, one thousand two hundred and sixty dollars and thirty-three cents;

Ezra Peebles, six hundred four dollars and forty-five cents;

J. C. Robbins, seven hundred sixty-nine dollars and fifty-five cents;

Cynthia B. Ripley, two hundred thirty-two dollars and twelve cents;

Isaiah Rifenbach, one thousand one hundred forty-nine dollars and eighty-two cents;

Valentine Mingel, one thousand four hundred sixty-five dollars and eighty-eight cents;

Alexander W. Stow, and Randall A. Stow, three thousand dollars;

Marcellus Ayers, one hundred and fifty dollars;

Harvey D. Saint John, six hundred dollars;

Theodore Herling, three hundred dollars;

Antoinette Herling, seventy-five dollars;

W. H. Miller, as administrator of the estate of William Miller, deceased, and I. Newton Miller, three thousand three hundred seventy-nine dollars and twenty cents;

John S. McDonald, six hundred and forty dollars;

Ralph O. Fox and Edward McCaffrey, one hundred seven dollars and twenty cents;

James Rockafellow, one hundred thirty-three dollars and thirty-eight cents;

Catherine Stillwell, four hundred thirty-nine dollars and forty-five cents;

Francis E. Aldrich, one hundred twenty dollars and seventy cents;

George Ennis and Samuel Ennis, six hundred dollars;

Martha J. Rundell, seventy-three dollars and twenty cents;

Joseph Yates, three hundred dollars;

R. S. Harrington, one hundred and twenty-five dollars;

Henry B. Basing, fifty dollars; in all, one hundred thousand, twenty-four dollars and fifty-three cents.

Provisos.
Limitation
for bringing
suits.

Provided, That hereafter the United States Government shall not be held liable for damages heretofore or now caused by the overflow of the lands or other property of any person in the prosecution or maintenance by the United States Government of any of the works of improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, unless the action of proceeding to ascertain and determine the amount for which compensation is now legally owing for the damages occasioned by such overflow, and as contemplated by the act of Congress approved March third, eighteen hundred and seventy-five, entitled "An act to aid in the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin," shall have been or shall be commenced as provided in said act, and the acts amendatory thereof, prior to the passage of this act, and all claims and causes of action now existing upon which no proceeding has been already or shall be taken within the time last specified to enforce the same shall be forever barred. And the said act approved March third, eighteen hundred and seventy-five be, and the same is hereby, repealed, but no action or proceeding which shall be pending shall be in any way affected by this repeal: *Provided, however*, That all appeals on the part of the United States to the courts from the awards, and determinations of any such commission shall proceed in the same manner as though said act had not been repealed.

Vol. 18, p.
506.
Ante, p. 252.

Vol. 18, c.
166, p. 506, re-
pealed.

Proviso.
Appeals.

Charles
Sweany.
Payment to,
damages, Fox
and Wisconsin
rivers.

To pay amount of judgment in favor of Charles Sweany for flowage damages caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, certified by the Attorney-General in House Executive Document Number Two hundred and seven, Forty-ninth Congress, first session, one thousand, sixty-seven dollars and nine cents, being in addition to the sum of one hundred fourteen dollars and sixty-five cents appropriated for costs on appeal to the superior court in the deficiency appropriation act approved August fourth, eighteen hundred and eighty-six.

To pay the amounts due the several commissioners to ascertain flowage damages caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, as follows:

Payment of commissioners to ascertain damages, Fox and Wisconsin rivers.

To Commissioner J. V. Swetting, one thousand one hundred seventy-three dollars and twenty-five cents;

To Commissioner J. C. Burdick, one thousand four hundred forty dollars and ninety-five cents;

To Commissioner J. C. Thompson, eight hundred eighty-two dollars and sixty cents;

To Commissioner G. H. Buckstaff, three hundred thirty-two dollars;

To Commissioner E. M. Wadsworth, two hundred fifty-five dollars and fifteen cents;

To Commissioner G. H. Read, three hundred fifty-seven dollars and thirty cents.

To Commissioner J. C. Burdick, one thousand five hundred and sixty-four dollars;

To Commissioner J. V. Swetting, one thousand five hundred and sixty-four dollars;

To Commissioner B. L. Cornish, one thousand four hundred and eighty-five dollars;

To Commissioner G. H. Buckstaff, one thousand four hundred and eighty-five dollars;

In all, ten thousand five hundred and thirty-nine dollars and eighty-five cents.

That so much of the act approved August fourth, eighteen hundred and eighty-six, making appropriations to supply deficiencies in the appropriations for the fiscal year eighteen hundred and eighty-six and for prior years, and for other purposes, as appropriates twenty-two thousand two hundred and eighty-seven dollars and six cents to pay the unappealed judgment and award of Augusta [sic] G. Ruggles, recovered against the United States, and reported by the Attorney-General in Executive Document Number Two hundred and seven, Forty-ninth Congress, first session, be, and the same is hereby, so amended as to appropriate only the sum of twenty thousand two hundred and eighty-seven dollars and six cents [a].

Augusta G. Ruggles. Amount appropriated for, reduced. Vol. 24, p. 283. Ante, p. 431.

* * * * *

Approved, February 1, 1888.

[No. 5.] Joint Resolution Authorizing the Secretary of War to appoint a Board of three engineers to examine and report in relation to the Delaware River between the city of Philadelphia, Pennsylvania, and Camden, New Jersey, and for other purposes.

Mar. 5, 1888.
Vol. 25, p. 618.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

^a The total amount paid to Augustus G. Ruggles under the act approved August 4, 1886, as amended by this act, approved February 1, 1888, was \$21,612.48, including interest.

Secretary of War to appoint Board of Engineers to examine Delaware River at Philadelphia, Pa., and Camden, N. J.

That the Secretary of War be, and he is hereby, authorized to immediately appoint a board of three engineers from the United States army whose duty it shall be to examine in all their relations to commerce the Islands known as Smith's Island, Windmill Island and Petty's Island in the Delaware River between the city of Philadelphia in the State of Pennsylvania and the city of Camden in the State of New Jersey, which board shall forthwith report to the Secretary of War as to whether said islands or any shoal in the said river between or adjacent to the said islands or any of them constitute an obstruction to the commerce of the Delaware river or to the passage of vessels between the said States and with a view to removing said islands and shoals to report a plan with the estimate of cost for their removal in whole or in part and for the improvement of the harbor of the port of Philadelphia including the probable cost to the Government of said islands so as to secure free and uninterrupted commerce upon the said Delaware river and the unobstructed passage of vessels to and from and between the said States; and the sum of five thousand dollars or so much thereof as shall be necessary is hereby appropriated to be paid out of any money in the Treasury not otherwise appropriated to defray the expense of such survey and report.

Appropriation.

Approved, March 5, 1888.

Mar. 30, 1888.
Vol. 25, p. 47.

CHAP. 47.—An Act To provide for certain of the most urgent deficiencies in the appropriations for the service of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-eight, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums, or so much thereof as may be necessary, be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, for the objects hereinafter expressed, for the service of the fiscal year ending June thirtieth, eighteen hundred and eighty-eight, and prior years, namely:

Urgent deficiencies appropriations.

Examinations, etc., South Pass, Mississippi River.

Vol. 18, p. 463.

Ante, p. 246.

Vol. 20, p. 168.

Ante, p. 281.

EXAMINATIONS AND SURVEYS AT SOUTH PASS, MISSISSIPPI RIVER: Annual expenses of ascertaining the depth of water and width of channel secured and maintained from time to time at South Pass of the Mississippi River, to enable the Secretary of War to report to Congress during the maintenance of the work, as required by Congress, eight thousand eight hundred dollars.

Approved, March 30, 1888.

CHAP. 55.—An Act For the relief of R. G. Huston and Company.

Apr. 2, 1888.
Vol. 25, p.
1030.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he hereby is, authorized and directed to pay R. G. Huston and John B. Neely, partners as R. G. Huston and Company, the sum of seven thousand five hundred and seventy-two dollars and forty-eight cents, for replacing earth and material washed away from the levees [on Mississippi River] from Milton to Raleigh, in the State of Louisiana, by the extraordinary floods of February, eighteen hundred and eighty-three, the same being in full payment for all extra work done by them in connection with their contract with the United States under date of October third, eighteen hundred and eighty-two; and said sum is hereby appropriated to the payment of the same out of any moneys in the Treasury not otherwise appropriated.

R. G. Huston
& Co.
Payment to.

Approved, April 2, 1888.

CHAP. 194.—An Act To facilitate the prosecution of works projected for the improvement of rivers and harbors.

Apr. 24, 1888.
Vol. 25, p. 94.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War may cause proceedings to be instituted, in the name of the United States, in any court having jurisdiction of such proceedings, for the acquirement by condemnation of any land, right of way, or material needed to enable him to maintain, operate or prosecute works for the improvement of rivers and harbors for which provision has been made by law; such proceedings to be prosecuted in accordance with the laws relating to suits for the condemnation of property of the States wherein the proceedings may be instituted: *Provided, however,* That when the owner of such land, right of way, or material shall fix a price for the same, which in the opinion of the Secretary of War, shall be reasonable, he may purchase the same at such price without further delay: *And provided further,* That the Secretary of War is hereby authorized to accept donations of lands or materials required for the maintenance or prosecution of such works [a].

Condemnation of land for river and harbor improvements.
Vol. 5, p. 468.
Ante, p. 95.

Provisos.
Purchase.

Donations.

Approved, April 24, 1888.

^a Act approved August 1, 1888 (chap. 728, vol. 25, p. 357, not included in this compilation), is somewhat similar to this act, though less comprehensive. See joint resolution approved September 11, 1841, page 95 hereof.

May 9, 1888. **CHAP. 234.**—An Act To authorize the city of Chicago to
Vol. 25, p. 136. erect a crib in Lake Michigan for water-works purposes.

Lake Michi-
gan.
Chicago au-
thorized to ex-
tend water
works.

Proviso.
Lights.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby given to the city of Chicago, county of Cook, State of Illinois, to extend a tunnel, or inlet pipes, into Lake Michigan, so far as may be deemed necessary, to insure a supply of pure water and to erect a pier or piers and crib in the navigable waters of said lake, for the making, preserving and working of said aqueducts or pipes or tunnel, the plan and location thereof to be subject to the approval of the Secretary of War: *Provided,* That said city shall furnish and maintain at its own expense, such beacon-lights or other signals on such piers or crib, as the Light-House Board shall prescribe.

Approved, May 9, 1888.

May 16, 1888. **CHAP. 257.**—An Act Relating to the anchorage of vessels in
Vol. 25, p. 151. the port of New York.

New York
Harbor.
Anchorage
grounds.
Regulations.

Penalty for
violating rules.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury is authorized, empowered, and directed to define and establish an anchorage ground for vessels in the bay and harbor of New York, and in the Hudson and East Rivers, to adopt suitable rules and regulations in relation thereto, and to take all necessary measures for the proper enforcement of such rules and regulations.

SEC. 2. That in the event of the violation of any such rules or regulations by the owner, master, or person in charge of any vessel, such owner, master, or person in charge of such vessel shall be liable to a penalty of one hundred dollars, and the said vessel may be holden for the payment of such penalty, and may be seized and proceeded against summarily by libel for the recovery of the same in any United States district court for the district within which such vessel may be, and in the name of the officer designated by the Secretary of the Treasury.

Effect.

SEC. 3. That this act shall take effect immediately.

Approved, May 16, 1888.

May 21, 1888. **CHAP. 304.**—An Act For the relief of Emory R. Seward.
Vol. 25, p. 1069.

Emory R. Se-
ward.
Payment to.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, directed to pay to Emory R. Seward, out of any money in the Treasury not otherwise appropriated, the sum of eight thousand one hundred and seventy-four dol-

lars and seventy-nine cents, for balance due said Seward for work done in removing rock at the entrance of New Rochelle Harbor, State of New York: *Provided, If* in the judgement of the Chief of Engineers, the necessities of commerce require the completion of said contract, or any portion of it, there shall in making settlement with the said Emory R. Seward be deducted from the above-named appropriation such an amount, as in his judgement, it will cost in excess of the sum of six hundred and twenty-five dollars to complete such contract in a manner to meet the necessities of commerce at that point.

Approved, May 21, 1888.

Proviso.

Deduction.

CHAP. 496.—An Act To prevent obstructive and injurious deposits within the harbor and adjacent waters of New York City, by dumping or otherwise, and to punish and prevent such offenses. June 29, 1888.
Vol. 25, p. 209.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the placing, discharging, or depositing, by any process or in any manner, of refuse, dirt, ashes, cinders, mud, sand, dredgings, sludge, acid, or any other matter of any kind, other than that flowing from streets, sewers, and passing therefrom in a liquid state, in the tidal waters of the harbor of New York, or its adjacent or tributary waters, or in those of Long Island Sound, within the limits which shall be prescribed by the supervisor of the harbor, is hereby strictly forbidden, and every such act is made a misdemeanor, and every person engaged in or who shall aid, abet, authorize, or instigate a violation of this section, shall, upon conviction, be punishable by fine or imprisonment, or both, such fine to be not less than two hundred and fifty dollars nor more than two thousand five hundred dollars, and the imprisonment to be not less than thirty days nor more than one year, either or both united, as the judge before whom conviction is obtained shall decide, one-half of said fine to be paid to the person or persons giving information which shall lead to the conviction of this misdemeanor.

New York Harbor.
Injurious deposits in, forbidden.
Vols. 24, p. 329; 28, p. 360; 30, p. 1155; 32, p. 375.
Ante, p. 462; *post*, pp. 709, 893, 1010.

Punishment.

SEC. 2. That any and every master and engineer, or person or persons acting in such capacity, respectively, on board of any boat or vessel, who shall knowingly engage in towing any scow, boat, or vessel loaded with any such prohibited matter to any point or place of deposit, or discharge in the waters of the harbor of New York, or in its adjacent, or tributary waters, or in those of Long Island Sound, or to any point or place elsewhere than within the limits defined and permitted by the supervisor of the harbor hereinafter mentioned, shall be deemed guilty of a violation of this act, and shall, upon conviction, be punishable as hereinbefore provided for offenses

Punishment to officer of boat violating.

in violation of section one of this act, and shall also have his license revoked or suspended for a term to be fixed by the judge before whom tried and convicted.

Transporting
matter to dis-
charging place.
Vol. 28, p.
360.
Post, p. 709.

SEC. 3. That in all cases of receiving on board of any scows or boats such forbidden matter or substance as herein described, it shall be the duty of the owner or master, or person acting in such capacity, on board of such scows or boats, before proceeding to take or tow the same to the place of deposit, to apply for and obtain from the supervisor of the harbor appointed hereunder a permit defining the precise limits within which the discharge of such scows or boats may be made; and any deviation from such dumping or discharging place specified in such permit shall be a misdemeanor within the meaning of this act; and the master and engineer, or person or persons acting in such capacity, on board of any tow-boat towing such scows or boats, shall be equally guilty of such offense with the master or person acting in the capacity of master of the scow, and be liable to equal punishment.^a

Permits.

Punishment
for violation.

Disposal of
matter dredg-
ed.

SEC. 4. That all mud, dirt, sand, dredgings, and material of every kind and description whatever taken, dredged, or excavated from any slip, basin, or shoal in the harbor of New York, or the waters adjacent or tributary thereto, and placed on any boat, scow, or vessel for the purpose of being taken or towed upon the waters of the harbor of New York to a place of deposit, shall be deposited and discharged at such place or within such limits as shall be defined and specified by the supervisor of the harbor, as in the third section of this act prescribed, and not otherwise. Every person, firm, or corporation being the owner of any slip, basin, or shoal, from which such mud, dirt, sand, dredgings, and material shall be taken, dredged, or excavated, and every person, firm, or corporation in any manner engaged in the work of dredging or excavating any such slip, basin, or shoal, or of removing such mud, dirt, sand, or dredgings therefrom, shall severally be responsible for the deposit and discharge of all such mud, dirt, sand, or dredgings at such place or within such limits so defined and prescribed by said supervisor of the harbor; and for every violation of the provisions of this section the person offending shall be guilty of an offense against this act, and shall be punished by a fine equal to the sum of five dollars for every cubic yard of mud, dirt, sand, dredgings, or material not deposited or discharged as required by this section. Any boat or vessel used or employed in violating any provision

Responsibili-
ty.

Legal pro-
ceedings.

^a This section is amended by section 3 of the act of August 18, 1894. Section 12 of the river and harbor act approved June 13, 1902, amends the last paragraph of section 20 of the river and harbor act approved March 3, 1899, by declaring that nothing in the last-named act shall be construed as repealing, modifying, or in any manner affecting the provisions of the above act, approved June 29, 1888, as amended by section 3 of the act of August 18, 1894.

of this act, shall be liable to the pecuniary penalties imposed thereby, and may be proceeded against summarily by way of libel in any district court of the United States, having jurisdiction thereof.

SEC. 5. That a line officer of the Navy shall be designated by the President of the United States as supervisor of the harbor, to act under the direction of the Secretary of War in enforcing the provisions of this act, and in detecting offenders against the same. This officer shall receive the sea-pay of his grade, and shall have personal charge and supervision under the Secretary of War, and shall direct the patrol boats and other means to detect and bring to punishment offenders against the provisions of this act.

Supervisor of harbor to be appointed.

SEC. 6. That the sum of thirty thousand dollars or so much thereof as may be necessary, is hereby appropriated to carry out the provisions of this act; and the Secretary of the Treasury is hereby authorized to pay that sum from moneys in the Treasury not otherwise appropriated.

Appropriation.

Approved, June 29, 1888.

CHAP. 860.—An Act Making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes.

Aug. 11, 1888.
Vol. 25, p. 400.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums of money be, and are hereby, appropriated, to be paid out of any money in the Treasury not otherwise appropriated, to be immediately available, and to be expended under the direction of the Secretary of War, for the construction, completion, repair, and preservation of the public works hereinafter named:

River and harbor appropriations.

Improving harbor at Rockland, Maine: Continuing improvement, thirty thousand dollars.

Harbors.
Rockland, Me.

Improving breakwater at the mouth of Saco River, Maine: Continuing improvements and repairs, twelve thousand five hundred dollars.

Mouth of
Saco River,
Me.

Improving harbor at York, Maine: Continuing improvement, ten thousand dollars.

York, Me.

For commencing the construction of a breakwater from Mount Desert to Porcupine Island, Maine, fifty thousand dollars.

Mount Desert
breakwater,
Me.

Improving harbor at Portland, Maine: Continuing improvement, forty thousand dollars.

Portland, Me.

Improving harbor at Camden, Maine, five thousand dollars.

Camden, Me.

Improving harbor at Back Cove, Portland Harbor, Maine: Continuing improvement, twenty-five thousand dollars.

Back Cove,
Portland, Me.

Improving harbor at Rockport, Maine, ten thousand dollars.

Rockport, Me.

- Portsmouth, N. H. Improving harbor at Portsmouth, New Hampshire: Continuing improvement, fifteen thousand dollars.
- Little Harbor, N. H. Improving harbor of refuge at Little Harbor, New Hampshire: Continuing improvement on the enlarged plan, twenty thousand dollars.
- Burlington, Vt. Improving harbor at Burlington, Vermont: Continuing improvement, thirty-five thousand dollars.
- Hero Islands, Vt. Improving the channel between the islands of North Hero and South Hero, Lake Champlain, Vermont, ten thousand dollars.
- Gordon's Landing, Vt. Improving harbor at Gordon's Landing, Lake Champlain, Vermont: Continuing improvement, ten thousand dollars.
- Boston, Mass. Improving harbor at Boston, Massachusetts: Continuing improvements, one hundred and twenty-five thousand dollars; one half of which shall be used in widening the main ship channel at the "upper and lower middle;" and so much thereof as may be necessary may be expended in extending the sea-wall at Gallup's Island.
- Lynn, Mass. Improving harbor at Lynn, Massachusetts: Continuing improvement, ten thousand dollars; a part of which may, in the discretion of the Secretary of War, be used at the Point of Pines and in the western channel leading thereto, and a portion in the basin enclosed by the wharves of said city of Lynn.
- Nantucket, Mass. Improving harbor at Nantucket, Massachusetts: Continuing improvement, twenty thousand dollars.
- Newburyport, Mass. Improving harbor at Newburyport, Massachusetts: Continuing improvement, twenty-five thousand dollars.
- Plymouth, Mass. Improving harbor at Plymouth, Massachusetts: Continuing improvement, six thousand dollars; a part of which may, in the discretion of the Secretary of War, be applied to the improvement in said harbor of Goose Point Channel to the port of Kingston and North Plymouth.
- Provincetown, Mass. Improving harbor at Provincetown, Massachusetts: To complete, seven thousand dollars.
- Scituate, Mass. Improving harbor at Scituate, Massachusetts: Continuing improvement, five thousand dollars.
- Gloucester, Mass. Improving harbor at Gloucester, Massachusetts: Dredging Harbor Cove and removing ledge and boulders obstructing the approach to the wharves between Harbor Cove and Pew Wharf, ten thousand dollars.
- Wareham, Mass. Improving harbor at Wareham, Massachusetts: Continuing improvement, four thousand dollars.
- New Bedford, Mass. Improving harbor at New Bedford, Massachusetts, ten thousand dollars.
- Hingham, Mass. Improving harbor at Hingham, Massachusetts: Continuing improvement, five thousand dollars, a part of which may, in the discretion of the Secretary of War, be applied to straighten the channel from the wharf to the end of Ragged Island.
- Winthrop, Mass. Improving harbor at Winthrop, Massachusetts: For dredging, one thousand dollars.

- Improving harbor at Hyannis, Massachusetts: Continuing improvement, ten thousand dollars. Hyannis, Mass.
- Improving harbor at Vineyard Haven, Massachusetts: For protection of Chops at the mouth of the harbor, twenty-five thousand dollars. Vineyard Haven, Mass.
- Improving harbor at Wellfleet, Massachusetts, seven thousand dollars. Wellfleet, Mass.
- Improving national harbor of refuge at Sandy Bay, Cape Ann, Massachusetts: Continuing improvement, one hundred thousand dollars. Sandy Bay, Mass.
- Improving harbor at Manchester, Massachusetts, two thousand five hundred dollars. Manchester, Mass.
- Improving harbor at Block Island, Rhode Island: Continuing improvement, fifteen thousand dollars; of which sum six thousand dollars are for inner harbor, four thousand dollars for breakwater, and five thousand dollars for removing sand bar at entrance of harbor. Block Island, R. I.
- Improving harbor at Newport, Rhode Island: Continuing improvement, twelve thousand dollars. Newport, R. I.
- Improving harbor at Bridgeport, Connecticut: Continuing improvement, ten thousand dollars; and the Secretary of War is authorized to expend such portion of said sum as he may deem advisable above the bridges across the stream emptying into said harbor. Bridgeport, Conn.
- Improving harbor at Black Rock, Connecticut: Continuing improvement, ten thousand dollars. Black Rock, Conn.
- Improving breakwater at New Haven, Connecticut: Continuing improvement, seventy-five thousand dollars; and the Chief of Engineers may, if deemed necessary, relocate the western breakwater; and the Secretary of War is authorized, in his discretion, to expend any portion of said sum in commencing its construction. New Haven, Conn.
- Improving harbor at New Haven, Connecticut: Continuing improvement, fifteen thousand dollars.
- Improving harbor at Norwalk, Connecticut: Continuing improvement, twenty-eight thousand dollars; twenty-five thousand dollars of which shall be expended in dredging and deepening the channel in the lower harbor up to Wilson's Point. Norwalk, Conn.
- Improving harbor at Stonington, Connecticut, eight thousand dollars. Stonington, Conn.
- Improving harbor at Stamford, Connecticut: Continuing improvement, five thousand dollars. Stamford, Conn.
- Improving harbor at Five Mile River, Connecticut, five thousand dollars. Five mile River, Conn.
- Improving harbor at Milford, Connecticut: To complete improvement, five thousand dollars. Milford, Conn.
- Improving harbor at Buffalo, New York: Continuing improvement, two hundred and twenty-five thousand dollars. Buffalo, N. Y.
- Improving Buttermilk Channel, New York: Continuing improvement, one hundred thousand dollars. Buttermilk channel, N. Y.
- Improving harbor at Sheepshead Bay, New York: Continuing improvement, five thousand dollars. Sheepshead Bay, N. Y.

- Rouse Point, N. Y. Improving breakwater at Rouse's Point, New York: Continuing improvement, thirteen thousand five hundred dollars.
- Canarsie Bay, N. Y. Improving harbor at Canarsie Bay, New York: Continuing improvement, ten thousand dollars.
- Charlotte, N. Y. Improving harbor at Charlotte, New York: Continuing improvement and repairs, forty-five thousand dollars.
- Dunkirk, N. Y. Improving harbor at Dunkirk, New York: Continuing improvement, fifteen thousand dollars.
- Flushing Bay, N. Y. Improving harbor at Flushing Bay, New York: Continuing improvement, fifteen thousand dollars.
- Gowanus Bay, N. Y. Improving channel at Gowanus Bay, New York: Continuing improvement, by deepening to twenty-one feet mean low water and widening the channel to four hundred feet on the northerly side from the foot of Percival street, along the wharves to the twenty-three feet curve, opposite the entrance to the Erie Basin, sixty thousand dollars.
- Great Sodus Bay, N. Y. Improving harbor at Great Sodus Bay, New York: Continuing improvement, twenty-four thousand dollars.
- Little Sodus Bay, N. Y. Improving harbor at Little Sodus Bay, New York: Continuing improvement, sixteen thousand dollars. And the Engineer in charge, with the approval of the Secretary of War, may use such part of this appropriation for dredging and deepening the channel and harbor, as he may deem proper.
- Greenport, N. Y. Improving harbor at Greenport, New York: Continuing improvement, five thousand dollars.
- Oak Orchard, N. Y. Improving harbor at Oak Orchard, New York: Continuing improvement and repairs, six thousand dollars.
- Ogdensburg, N. Y. Improving harbor at Ogdensburg, New York, including the clearing out of the mouth of the Oswegatchie River: Continuing improvement, fifteen thousand dollars.
- Olcott, N. Y. Improving harbor at Olcott, New York: Continuing improvement, five thousand dollars.
- Oswego, N. Y. Improving harbor at Oswego, New York: Continuing improvement and repairs, one hundred thousand dollars; of which fifteen thousand dollars shall be used in removing the east break water at the mouth of the river.
- Plattsburg, N. Y. Improving harbor at Plattsburgh, New York: To complete improvement, seven thousand dollars.
- Rondout, N. Y. Improving harbor at Rondout, New York: To complete improvement, five thousand dollars.
- Sacketts Harbor, N. Y. Improving harbor at Sackett's, New York: Continuing improvement, two thousand dollars.
- Tonawanda, N. Y. Improving Tonawanda Harbor and Niagara River, New York, as per report of engineer in charge, dated December twenty-nine, eighteen hundred and eighty-seven, one hundred thousand dollars.
- New York, N. Y. Improving New York Harbor, New York: Continuing improvement, three hundred and eighty thousand dollars.

Improving harbor at Saugerties, New York: Continuing improvement, twelve thousand dollars. Saugerties, N. Y.

Improving harbor at Wilson, New York: Continuing improvement, five thousand dollars. Wilson, N. Y.

Improving harbor at Port Chester, New York: Continuing improvement, five thousand dollars. Port Chester, N. Y.

Improving harbor at Glen Cove, New York, twenty thousand dollars. Glencove, N. Y.

Improving harbor at New Rochelle, New York: Continuing improvement, the balance remaining on hand from former appropriations to be expended in pursuance of the project adopted in eighteen hundred and seventy-one. New Rochelle, N. Y.

Improving channel between Staten Island and the New Jersey shore, New York and New Jersey: Continuing improvement, by dredging fifteen thousand dollars. Staten Island channel, N. Y.

Improving Arthur Kill, between Staten Island and the New Jersey shore, New York and New Jersey: Dredging and straightening channel near Staten Island bridge, and removing the point of land westerly of same, ten thousand dollars. Arthur Kill, N. Y.

Improving harbor at Raritan Bay, New Jersey: Continuing improvement, twenty-five thousand dollars. Raritan Bay, N. J.

Improving harbor at Erie, Pennsylvania: Continuing improvement, twenty-three thousand dollars. Erie, Pa.

For the preservation and protection of the peninsula of Presque Isle, Erie Harbor, Pennsylvania, as recommended by the Chief of Engineers, January thirteenth, eighteen hundred and eighty-five, and in accordance with such plans as the Secretary of War may prescribe, sixty thousand dollars. Presque Isle, Pa.

Improving the harbor of Philadelphia: For the removal of Smith's Island, and Windmill Island, in the State of Pennsylvania, and Petty's Island, in the State of New Jersey, or such parts of them and the shoals adjacent thereto as may be required, and for the improvement of the harbor between the cities of Philadelphia, Pennsylvania, and Camden, New Jersey, five hundred thousand dollars: *Provided*, That no part of this sum shall be expended until the title to the lands forming said islands shall be acquired and vested in the United States without charge to the latter beyond three hundred thousand dollars of the sum herein appropriated. Philadelphia.

Improving ice-harbor at Marcus Hook, Pennsylvania: Continuing improvement, fifteen thousand dollars. Marcus Hook, Pa.

Improving Delaware Breakwater, Delaware: Continuing improvement, one hundred thousand dollars. Delaware Breakwater.

Improving ice-harbor at New Castle, Delaware: Continuing improvement, seven thousand five hundred dollars. New castle, Del.

Improving harbor at Wilmington, Delaware: Continuing improvement, thirty thousand dollars. Wilmington, Del.

- Baltimore, Md. Improving harbor at Baltimore, Maryland: Continuing improvement, and widening channel to six hundred feet, three hundred thousand dollars.
- Breton Bay, Md. Improving harbor at Breton Bay, Maryland: Continuing improvement, three thousand dollars.
- Cambridge, Md. Improving harbor at Cambridge, Maryland, five thousand dollars.
- Norfolk, Va. Improving harbor at Norfolk and its approaches, Virginia: Continuing improvement, fifty thousand dollars.
Improving approach to Norfolk Harbor, and the United States navy-yard at Norfolk, Virginia: Continuing improvement between Lambert's Point and Fort Norfolk, ten thousand dollars; and the balance of one hundred and nine thousand dollars of former appropriations made under this head and available July first, eighteen hundred and eighty-seven, is hereby authorized to be expended according to the modified plan of the engineer in charge.
- Beaufort, N. C. Improving harbor at Beaufort, North Carolina: Continuing improvement, thirty-five thousand dollars.
- Waterway, Beaufort and New River N. C. Improving the inland water-way between Beaufort and New River, North Carolina: Continuing improvement, five thousand dollars.
- Newbern and Beaufort. Improving the inland water-way between New Berne and Beaufort, North Carolina: Continuing improvement, fifteen thousand dollars.
- Charleston, S. C. Improving harbor at Charleston, including Sullivan's Island, South Carolina: Continuing improvements, three hundred and fifty thousand dollars, of which five thousand dollars may be expended on Mount Pleasant shore of inner harbor of Charleston, South Carolina.
- Georgetown, S. C. Improving harbor at Georgetown, South Carolina: Continuing improvement, seven thousand five hundred dollars.
- Winyah Bay, S. C. Improving Winyaw Bay, South Carolina: Continuing improvement, one hundred thousand dollars. The Secretary of War is authorized and directed to appoint a board of three engineer officers of the United States Army, whose duty it shall be to examine the plan submitted by Captain William H. Bixby, United States Army Engineers, under date of January thirty-first, eighteen hundred and eighty-five, for the improvement of said bay. The said board shall report to the Secretary of War, who shall lay its report before Congress at its next session, with the views of himself and the Chief of Engineers of the United States Army thereon: *Provided*, That nothing herein contained shall be construed to prevent the expenditure of this appropriation.
- Proviso.*
- Brunswick, Ga. Improving harbor at Brunswick, Georgia: Continuing improvement, thirty-five thousand dollars.
- Cumberland Sound, Ga. and Fla. Improving Cumberland Sound, Georgia and Florida: Continuing improvement, one hundred and twelve thousand five hundred dollars.

Improving harbor at Savannah, Georgia: To complete existing project, one hundred and eighty thousand dollars. Savannah,
Ga.

Improving harbor at San [Saint] Augustine, Florida, thirty-five thousand dollars. The Secretary of War is authorized and directed to appoint a board of three engineer officers of the United States Army, whose duty it shall be to examine into the expediency of further improving the harbor of San [Saint] Augustine, Florida, upon the plan submitted by Lieutenant William M. Black, United States Army Engineers, under date of December twelfth, eighteen hundred and eighty-seven. The said board shall report to the Secretary of War, who shall lay its report before Congress at its next session, with the views of himself and the Chief of Engineers of the United States Army thereon. St. August-
tine, Fla.

Improving harbor at Apalachicola Bay, Florida: Continuing improvement, twenty thousand dollars. Apalachicola
Bay, Fla.

Improving harbor at Cedar Keys, Florida: Continuing improvement, seven thousand five hundred dollars. Cedar Keys,
Fla.

Improving harbor at Pensacola, Florida: Continuing improvement, thirty-five thousand dollars. Pensacola,
Fla.

Improving harbor at Tampa Bay, Florida, from outer bar to Mangrove or Bushy Point, twenty-five thousand dollars. Tampa Bay,
Fla.

Improving entrance to harbor at Key West, Florida, twenty-five thousand dollars. The Secretary of War is authorized and directed to appoint a board of three engineer officers of the United States Army, whose duty it shall be to examine into the expediency of further improving the entrance to the harbor at Key West, Florida, upon the plan submitted by Lieutenant William M. Black, United States Army Engineers, under date of May thirty-first, eighteen hundred and eighty-seven; the said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon. Key - West,
Fla.

Improving harbor at Mobile, Alabama: Continuing improvement, on enlarged project for securing a channel twenty-three feet deep and two hundred and eighty feet wide, two hundred and fifty thousand dollars. Mobile, Ala.

Improving harbor at Biloxi Bay, Mississippi: Continuing improvement, eighteen thousand five hundred dollars. Biloxi Bay,
Miss.

Improving Aransas Pass and Bay up to Rockport and Corpus Christi, Texas: Continuing improvement, one hundred thousand dollars. Aransas
Pass, Tex.

Improving Brazos, Santiago Harbor, Texas: Continuing improvement, twenty-five thousand dollars. Brazos San-
tiago, Tex.

Improvement of entrance to Galveston Harbor, Texas: Continuing improvement, five hundred thousand dollars. Galveston,
Tex.

Improving Sabine Pass, and Blue Buck Bar, Texas: Continuing improvement, two hundred and fifty thousand dollars. Sabine Pass,
Tex.

- Galveston, Tex., ship channel. Improving ship-channel in Galveston Bay, Texas, from Morgan's Cut to Bolivar Channel: Continuing improvement, one hundred thousand dollars.
- Ashtabula, Ohio. Improving harbor at Ashtabula, Ohio: Continuing improvement, twenty-five thousand dollars.
- Black River, Ohio. Improving harbor at mouth of Black River, Ohio: Continuing improvement, ten thousand dollars.
- Cleveland, Ohio. Improving harbor at Cleveland, Ohio: Continuing improvement on the last plan projected, one hundred thousand dollars.
- Fairport, Ohio. Vol. 25, p. 631. *Post*, p. 534. Improving harbor at Fairport, Ohio: Continuing improvement, ten thousand dollars; of which so much as may be necessary may be expended in deepening the river. That the owners of dock property abutting on Grand River, at the mouth thereof, shall have the right to load and unload coal, ore, and other freight over so much of the east Government pier as lies north of the present low-water mark [^a], under such limitations as to time and use as shall be approved by the Secretary of War on the payment of such compensation as the Secretary of War shall determine.
- Huron, Ohio. Improving harbor at Huron, Ohio: Continuing improvement, six thousand dollars.
- Vermillion, Ohio. Improving harbor at Vermillion, Ohio: For preservation of piers, one thousand dollars.
- Muskingum River, Ohio. For ice harbor at the mouth of Muskingum River, Ohio: To complete, sixty thousand dollars.
- Port Clinton, Ohio. Improving harbor at Port Clinton, Ohio: Continuing improvement, five thousand dollars.
- Sandusky, Ohio. Improving harbor at Sandusky, Ohio: Continuing improvement by a straight channel from Sandusky City to the entrance of Sandusky Bay, pursuant to the last plan of the engineers, forty thousand dollars; of which five thousand dollars, or so much as may be necessary, may be used, in the discretion of the Secretary of War, in improving the old channel.
- Toledo, Ohio. Improving harbor at Toledo, Ohio: Continuing improvement of the Maumee River, by a straight channel, pursuant to the last plan of the engineer in charge, one hundred and fifty thousand dollars.
- Michigan City, Ind. Improving harbor at Toledo, Ohio: For clearing the old channel, five thousand dollars.
- Michigan City, Ind. Improving outer harbor at Michigan City, Indiana: Continuing improvement, ninety thousand dollars.
- To complete inner harbor at Michigan City, five thousand dollars.
- Calumet, Ill. Improving harbor at Calumet, Illinois: To complete improvement, twenty thousand four hundred dollars.
- Chicago, Ill. Improving harbor at Chicago, Illinois: Continuing improvement, two hundred thousand dollars.

^a The meaning of this phrase is declared by joint resolution approved October 1, 1888.

Improving harbor at Waukegan, Illinois: Continuing improvement, twenty-five thousand dollars. Waukegan, Ill.

Improving harbor at Charlevoix and entrance to Pine Lake, Michigan, twelve thousand five hundred dollars. Charlevoix, Mich.

Improving harbor at Cheboygan, Michigan: Continuing improvement, fifteen thousand dollars. Cheboygan, Mich. Vol. 28, p. 345. Post, p. 687.

Improving harbor at Frankfort, Michigan: Continuing improvement, eight thousand dollars. Frankfort, Mich.

Improving harbor at Grand Haven, Michigan: Continuing improvement, twenty-five thousand dollars. Grand Haven, Mich.

Improving harbor of refuge at Grand Marais, Michigan: Continuing improvement, fifty thousand dollars. Grand Marais, Mich.

Improving harbor of refuge at Ludington, Michigan: Continuing improvement, sixty thousand dollars; and the Secretary of War is hereby authorized and directed to accept the deed tendered by the Pere Marquette Lumber Company, of Ludington, Michigan, of three and thirty-one hundredths acres of land. Ludington, Mich.

Improving harbor at Manistee, Michigan: Continuing improvement, ten thousand dollars. Manistee, Mich.

Improving harbor at Black Lake, Michigan: Continuing improvement, five thousand dollars. Black Lake (Holland), Mich.

Improving harbor at Monroe, Michigan: For repairs and for dredging at mouth of river, five thousand dollars. Monroe, Mich.

Improving harbor at Muskegon, Michigan: Continuing improvement, forty-five thousand dollars. Muskegon, Mich.

Improving harbor at Ontonagon, Michigan: Continuing improvement, twelve thousand five hundred dollars. Ontonagon, Mich.

Improving harbor at Pentwater, Michigan: Continuing improvement, eight thousand dollars. Pentwater, Mich.

Improving harbor of refuge at Portage Lake, Michigan: Continuing improvement, ten thousand dollars. Portage Lake, Mich.

Improving harbor of refuge at Sand Beach, Michigan: Continuing improvement, seventy thousand dollars. Sand Beach (Harbor Beach), Mich.

Improving harbor at Saint Joseph, Michigan: Continuing improvement, twelve thousand dollars; five thousand dollars to be used in improving the water channel leading up to Benton Harbor. St. Joseph, Mich.

Improving harbor of Saugatuck, Michigan: To repair and maintain, five thousand dollars. Saugatuck, Mich.

Improving harbor at South Haven, Michigan: Continuing improvement, ten thousand dollars; three thousand dollars of which shall be used in deepening the channel of Black River from the inner termini of the piers to the highway bridge. South Haven, Mich.

Improving harbor at White River, Michigan: Continuing improvement, ten thousand dollars. White River, Mich.

Improving harbor at Marquette, Michigan: Continuing improvement, twenty-five thousand dollars: *Provided*, That no part of this appropriation shall be expended until the question of harbor limits has been settled to the satisfaction of the Secretary of War. Marquette, Mich. *Proviso.*

Thunder Bay
(Alpena), Mich.

Improving harbor at Thunder Bay, Michigan: Continuing improvement, the balance available from former appropriations shall be expended in dredging the entrance channel from the bay into the river.

Au Sable,
Mich.

Improving harbor at Au Sable, Michigan: Continuing improvement, the balance available from former appropriations shall be expended in dredging the mouth of Au Sable River.

Ahnapee,
Wis.

Improving harbor at Ahnapee, Wisconsin: Continuing improvement, five thousand dollars; and so much of the act of August fifth, eighteen hundred and eighty-six, for the improvement of rivers and harbors as relates to the harbor of Ahnapee is hereby amended by striking out the words "but no part of said sum is to be expended until the wharfage over the Government pier at that port shall be made free."

Vol. 24, p.
315.
Ante, p. 442.

Green Bay,
Wis.

Improving harbor at Green Bay, Wisconsin: Continuing improvement, ten thousand dollars.

Kenosha,
Wis.

Improving harbor at Kenosha, Wisconsin: Continuing improvement, seven thousand five hundred dollars.

Kewaunee,
Wis.

Improving harbor at Kewaunee, Wisconsin: Continuing improvement, ten thousand dollars.

Manitowoc,
Wis.

Improving harbor at Manitowoc, Wisconsin: Continuing improvement, eight thousand dollars.

Menominee,
Wis.

Improving harbor at Menominee, Wisconsin: For repairs and dredging, nine thousand dollars.

Milwaukee,
Wis.

Improving harbor of refuge at Milwaukee, Wisconsin: Continuing improvement on bay and harbor, seventy thousand dollars.

Improving harbor at Milwaukee, Wisconsin: Continuing improvement, ten thousand dollars.

Oconto, Wis.

Improving harbor at Oconto, Wisconsin: Continuing improvement, twenty thousand dollars; eighteen thousand dollars of which appropriation shall not be available, until the city of Oconto has caused repairs to be made, to the satisfaction of the engineer in charge, to the old part of the pier built by private enterprise.

Port Wash-
ington, Wis.

Improving harbor at Port Washington, Wisconsin: Continuing improvement, five thousand dollars.

Racine, Wis.

Improving harbor at Racine, Wisconsin: Continuing improvement, ten thousand dollars.

Superior and
St. Louis bays,
Wis.

Improving harbor at Superior Bay and Saint Louis Bay, Wisconsin: Continuing improvement, fifty thousand dollars.

Sheboygan,
Wis.

Improving harbor at Sheboygan, Wisconsin: Continuing improvement, fifteen thousand dollars.

Ashland,
Wis.

Improving harbor at Ashland, Wisconsin: Continuing improvement on the enlarged project, sixty thousand dollars.

Two Rivers,
Wis.

Improving harbor at Two Rivers, Wisconsin: Continuing improvement, two thousand five hundred dollars.

Duluth,
Minn.

Improving harbor at Duluth, Minnesota: Continuing improvement, eighty thousand dollars; of which sum

one-half shall be expended on the harbor basin and new channel east of Rice's Point, and in the preservation and maintenance of the canal and piers at the harbor entrance, and in the purchase of a steam launch; and the other half of said sum shall be expended on the channel west of Rice's Point, and from thence along the northern shore of Saint Louis Bay to Grassy Point; and the Government of the United States hereby accepts from the city of Duluth the grant and conveyance made by said city, by deed dated January ninth, eighteen hundred and eighty-eight, of the following described real estate, to wit: All the tract or parcel of land lying and being in the county of Saint Louis and State of Minnesota described as follows, to wit: Lots two hundred and forty-seven, two hundred and forty-eight, two hundred and forty-nine, two hundred and fifty, two hundred and fifty-one, two hundred and fifty-two, two hundred and fifty-three, two hundred and fifty-four, two hundred and fifty-five, two hundred and fifty-six, two hundred and fifty-seven, two hundred and fifty-eight, two hundred and fifty-nine, and two hundred and sixty Minnesota avenue, Upper Duluth, the same being the ground on which is located the canal entrance and piers to the harbor of Duluth.

Acceptance
of canal en-
trance and
piers.
Vol. 27, p. 95.
Post, p. 621.

Improving harbor at Grand Marais, Minnesota: Continuing improvement, fifteen thousand dollars.

Grand Ma-
rais, Minn.

Improving harbor at Agate Bay, Minnesota: Continuing improvement, fifteen thousand dollars.

Agate Bay,
Minn.

Improving harbor and bay at Humboldt, California: Continuing improvement, one hundred and twenty-five thousand dollars: *Provided*, That no part of said sum shall be expended until the twelve acres of land necessary to said improvement shall have been conveyed to the United States free of expense, and such conveyance has been approved by the Secretary of War, after the Attorney-General of the United States shall have certified to the Secretary of War that the title is perfect.

Humboldt
Bay, Cal.

Proviso.
Title.

Improving harbor at Oakland, California: Continuing improvement, three hundred and fifty thousand dollars; which sum, or any part thereof, may be used in the discretion of the Secretary of War on the training walls and channel.

Oakland, Cal.

Improving harbor at Red Wood, California: To complete, seven thousand four hundred dollars.

Red wood,
Cal.

Improving harbor at Wilmington, California: Continuing improvement, ninety thousand dollars.

Wilmington,
Cal.

Improving harbor at San Diego, California: For repairs, one thousand dollars.

San Diego,
Cal.

Improving harbor at San Luis Obispo, California, by the construction of a breakwater on the reef to the plane of mean low water, according to the plan of W. H. Benyaurd, major of engineers, dated January twenty-eighth, eighteen hundred and eighty-seven, twenty-five thousand dollars.

San Luis
Obispo, Cal.

- Coos Bay, Oreg. Improving entrance to harbor at Coos Bay, Oregon: Continuing improvement, fifty thousand dollars.
- Yaquina Bay, Oreg. Improving harbor at Yaquina Bay, Oregon: Continuing improvement, one hundred and fifty thousand dollars.
- Tillamook Bay, Oreg. Improving Tillamook Bay and Bar, Oregon, five thousand two hundred dollars.
- Lubec Channel, Me. Improving Lubec Channel, Maine: Continuing improvement, twenty thousand dollars.
- Rivers: Penobscot River, Me. Improving Penobscot River, Maine: Continuing improvement, fifty thousand dollars; twenty thousand dollars of which sum to be expended between Bangor and Crosby's Narrows, and thirty thousand dollars between Bucksport and Winterport, according to the last plan of the engineer in charge if approved by the Secretary of War.
- Narraguagus River, Me. Improving Narraguagus River, Maine: Continuing improvement, ten thousand dollars.
- Saco River, Me. Improving Saco River, Maine: Continuing improvement, ten thousand dollars.
- Bagaduce River, Me. Improving Bagaduce River, Maine, three thousand dollars.
- Kennebec River, Me. Improving Kennebec River, Maine, seventy-five thousand dollars.
- Moosabec bar, Me. Improving Moose-a-Bec Bar, Maine: Continuing improvement, fifteen thousand dollars.
- Cocheco River, N. H. Improving Cocheco River, New Hampshire: To complete, nine thousand dollars.
- Bellamy River, N. H. Improving Bellamy River, New Hampshire, ten thousand dollars.
- Otter Creek, Vt. Improving Otter Creek, Vermont: Continuing improvement, two thousand five hundred dollars.
- Ipswich River, Mass. Improving Ipswich River, Massachusetts, two thousand five hundred dollars.
- Powow River, Mass. Improving Powow River, Massachusetts, for dredging, three thousand dollars: *Provided*, That this sum shall not be expended until the towns of Amesbury and Salisbury, or either of them, shall have caused such a draw to be placed in the present bridge over said river, as may be approved by the Secretary of War.
- Pawtucket River, R. I. Improving Pawtucket River, Rhode Island: Continuing improvement, thirty-five thousand dollars.
- Providence River, R. I. Improving Providence River and Narragansett Bay, Rhode Island: Continuing improvement, forty thousand dollars.
- For removing Green Jacket Shoal, Providence River, Rhode Island: Continuing improvement, twenty-eight thousand dollars.
- Pawcatuck River, R. I. Improving Pawcatuck River, Rhode Island: Continuing improvement, ten thousand dollars.
- Connecticut River, Conn. Improving Connecticut River below Hartford, Connecticut: Continuing improvement, ten thousand dollars.
- Housatonic River, Conn. Improving Housatonic River, Connecticut, thirty-five thousand dollars; twenty-five thousand dollars of which

may be expended in commencing the construction of a breakwater at the mouth of said river.

Improving Thames River, Connecticut: Continuing improvement, fifty thousand dollars, which may be expended at any point between Norwich and New London. Thames River, Conn.

Improving East Chester Creek, New York: Continuing improvement, five thousand dollars. East Chester Creek, N. Y.

Improving Hudson River, New York: Continuing improvement, seventy-five thousand dollars; of which ten thousand dollars may be used in dredging and otherwise deepening and improving the harbor at Peekskill. Hudson River, N. Y.

Improving Newtown Creek and Bay, New York: Continuing improvement, twenty-five thousand dollars, a portion of which may, in the discretion of the Secretary of War, be applied to the improvement of the west branch of Newtown Creek. Newtown Creek, N. Y.

Improving Ticonderoga River, New York: Continuing improvement, two thousand five hundred dollars. Ticonderoga River, N. Y.

Improving Harlem River, New York, seventy thousand dollars. Harlem River, N. Y.

Improving East River and Hell Gate, New York: Removing obstructions, two hundred and fifty thousand dollars. East River, N. Y.

Improving Narrows at Lake Champlain, New York, from Benson, Vermont, to canal locks at Whitehall, New York, fifteen thousand dollars. Narrows, Lake Champlain, N. Y.

Improving Grass River at Massena, New York: The Secretary of War is authorized and directed to expend the balance remaining on hand of the sum heretofore appropriated in dredging operations according to the original plan. Grass River, N. Y.

Improving Maurice River, New Jersey: Continuing improvement, ten thousand dollars. Maurice River, N. J.

Improving Passaic River, New Jersey: Continuing improvement, thirty-five thousand dollars; of which seven thousand five hundred dollars are to be used to complete improvement above Newark. Passaic River, N. J.

Improving Raritan River, New Jersey: Continuing improvement, fifty thousand dollars. Raritan River, N. J.

Improving Shrewsbury River, New Jersey: Continuing improvement, ten thousand dollars. Shrewsbury River, N. J.

Improving South River, New Jersey: Continuing improvement, five thousand dollars. South River, N. J.

Improving Allegheny River, Pennsylvania: Continuing improvement, twenty-five thousand dollars. Allegheny River, Pa.

Improving Schuylkill River, Pennsylvania: Continuing improvement, twenty-five thousand dollars. Schuylkill River, Pa.

Improving Delaware River, Pennsylvania and New Jersey: Continuing improvement from Trenton to its mouth, two hundred and fifty thousand dollars; of which ten thousand dollars is to be expended upon said river and its tidal tributaries between Cooper's Creek and Trenton. Delaware River, Pa. and N. J.

For continuation of construction of the dam at Herr's Island, in the Allegheny River, near Pittsburgh, Penn- Herr Island dam, Allegheny River, Pa.

sylvania, thirty-five thousand dollars; and the Secretary of War is hereby authorized to purchase the lands required for said dam and its appurtenances, or, at his discretion, to cause suit to be instituted for the condemnation of such lands as may be necessary therefor; and said sum of thirty-five thousand dollars, or so much thereof as may be necessary, is hereby made available for paying for said lands, whether procured by purchase or by condemnation, as authorized by the act of the legislature of Pennsylvania approved May eighteenth, eighteen hundred and eighty-seven.

St. Jones River, Del. Improving Saint Jones River, Delaware: Continuing improvement, fifteen thousand dollars.

Smyrna River, Del. Improving Duck Creek [Smyrna River], Delaware, by dredging, ten thousand dollars.

Mispyllion Creek, Del. Improving Mispillion Creek, Delaware: To complete from Milford to its mouth, three thousand five hundred dollars.

Broadkill River, Del. Improving Broadkill River, Delaware: Continuing improvement, ten thousand dollars.

Broad Creek River, Del. Improving Broad Creek [Broad Creek River], Delaware: Continuing improvement, five thousand dollars.

Choptank River, Md. Improving Choptank River, Maryland: Continuing improvement, seven thousand five hundred dollars.

Corsica River, Md. Improving Corsica River, Maryland: Continuing improvement, ten thousand dollars.

Susquehanna River, Md. and Pa. Improving Susquehanna River, Maryland and Pennsylvania: Continuing improvement, ten thousand dollars, to be expended above the Philadelphia, Wilmington and Baltimore Railroad bridge.

Fairlee Creek, Md. Improving Fairlee Creek or Inlet, Maryland, five thousand dollars.

Patuxent River, Md. Improving Patuxent River, Maryland, five thousand dollars.

Potomac River, D. C. Improving Potomac River at Washington: Continuing improvement, three hundred thousand dollars.

Appomattox River, Va. Improving Appomattox River, Virginia: Continuing improvement, fifteen thousand dollars; and the Chief of Engineers is directed to cause to be examined and surveyed, and the cost estimated, for diverting the water of the river above the harbor at Petersburg to the old North Channel, and report upon the same.

Chickahominy River, Va. Improving Chickahominy River, Virginia: Continuing improvement, two thousand five hundred dollars.

James River, Va. Improving James River, Virginia: Continuing improvement below Richmond, two hundred and twenty-five thousand dollars.

Mattaponi River, Va. Improving Mattaponi River, Virginia: Continuing improvement, three thousand dollars.

Potomac River, Mount Vernon, Va. Improving channel at Mount Vernon: Continuing improvement, six thousand dollars.

Nomini Creek, Va. Improving Nomini Creek, Virginia: Continuing improvement, five thousand dollars.

Improving Pamunkey River, Virginia: Continuing improvement, three thousand dollars. Pamunkey River, Va.

Improving Rappahannock River, Virginia: Continuing improvement, fifteen thousand dollars; of which three thousand dollars may, in the discretion of the Secretary of War, be used in continuing the improvement of Urbana Creek, a tidal tributary thereof. Rappahannock River, Va.

Improving Staunton River, Virginia: Continuing improvement, five thousand dollars. Staunton River, Va.

Improving York River, Virginia: Continuing improvement, thirty thousand dollars. York River, Va.

Improving, by dredging and otherwise, the inland water-way, from Chincoteague Bay, Virginia, to Delaware Bay, at or near Lewes, Delaware, to be used from Chincoteague Bay to Indian River Bay: Continuing improvement, fifty thousand dollars, no part of which shall be expended until the right of way is secured free of cost to the United States. Waterway, Delaware and Chincoteague bays.

Improving Nansemond River, Virginia, including the mouths of Bennett and Chuckatuck Creeks, ten thousand dollars. Nansemond River, Va.

Improving Big Sandy River, West Virginia and Kentucky: Continuing improvement, thirty-one thousand five hundred dollars. Big Sandy River, W. Va. and Ky.

Improving Elk River, West Virginia: Continuing improvement, three thousand dollars. Elk River, W. Va.

Improving Buckhannon River, West Virginia: Continuing improvement, one thousand five hundred dollars. Buckhannon River, W. Va.

Improving Great Kanawha River, West Virginia: Continuing improvement, three hundred and fifty thousand dollars. Kanawha River, W. Va.

Improving Guyandotte River, West Virginia: Continuing improvement, two thousand dollars. Guyandotte River, W. Va.

Improving Little Kanawha River, West Virginia: Continuing improvement, twenty-five thousand dollars; but no toll shall be collected by any person or corporation for this improved navigation; and such right, if any exist, shall be relinquished in a manner satisfactory to the Secretary of War before the expenditure of any of the money herein appropriated for this work. Little Kanawha River, W. Va. Tolls abolished.

Improving Monongahela River, West Virginia: To complete dam number eight, thirty-five thousand dollars; and for continuing improvements. Monongahela River, W. Va.

The Secretary of War be, and is hereby, authorized and directed to negotiate for and purchase, at a cost not to exceed one hundred and sixty-one thousand seven hundred and thirty-three dollars and thirteen cents, lock and dam number seven, otherwise known as "the Upper Lock and Dam," and its appurtenances, of the Monongahela Navigation Company, a corporation organized under the laws of Pennsylvania, which lock and dam number seven and its appurtenances constitute a part of the improvements in water communication in the Monongahela River, Purchase of Lock and Dam No. 7 from Monongahela Navigation Company. Vols. 28, pp. 348, 973; 29, pp. 217, 218. Post, pp. 691, 735, 766.

between Pittsburgh, in the State of Pennsylvania, and a point at or near Morgantown, in the State of West Virginia. And the sum of one hundred and sixty-one thousand seven hundred and thirty-three dollars and thirteen cents [a], or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, for consummating said purchase, the same to be paid on the warrant of the Secretary of War, upon full and absolute conveyance to the United States of the said lock and dam number seven, and its appurtenances, of the said Monongahela Navigation Company.

Condemnation proceedings.

In the event of the inability of the Secretary of War to make voluntary purchase of said lock and dam number seven and its appurtenances for said sum of one hundred and sixty-one thousand seven hundred and thirty-three dollars and thirteen cents, or a less sum, then the Secretary of War is hereby authorized and directed to institute and carry to completion proceedings for the condemnation of said lock and dam number seven and its appurtenances, said condemnation proceedings to be as prescribed and regulated by the provisions of the general railroad law of Pennsylvania, approved February nineteenth, eighteen hundred and forty-nine, and its supplements, except that the United States shall not be required to give any bond, and except that jurisdiction of said proceedings is hereby given to the circuit court of the United States for the western district of Pennsylvania, with right of appeal by either party to the Supreme Court of the United States: *Provided*, That in estimating the sum to be paid by the United States, the franchise of said corporation to collect tolls shall not be considered or estimated; and the sum of five thousand dollars [a], or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, to pay the necessary costs of said condemnation proceedings; and upon final judgment being entered therein the Secretary of War is hereby authorized and directed to draw his warrant on the Treasury for the amount of said judgment and costs, and said amount for the payment thereof is hereby appropriated out of any moneys in the Treasury not otherwise appropriated. And when said lock and dam number seven and its ap-

Proviso. Estimating value.

Operating expenses.

^a Of the appropriations (viz, \$161,733.13 for purchase and \$5,000 for expenses of condemnation proceedings) made by this act for acquisition of Lock and Dam No. 7, \$400 was expended from the purchase fund, and \$4,901.36 from that for condemnation, making the total expenditure thereunder \$5,301.36, the balances having been carried to the surplus fund. All of the property of the company on this river, including Lock and Dam No. 7, was acquired by the United States in July, 1897, pursuant to the provisions of the river and harbor act of June 3, 1896, with funds appropriated by that act, the total cost of acquisition (including the \$5,301.36 previously expended) being \$3,769,073.88, of which \$3,761,615.46 was the award in condemnation.

purtenances shall have been acquired by the United States, whether by purchase or condemnation, the Secretary of War shall take charge thereof, and the same shall thereafter be subject to the provisions of section four of an act entitled "An act making appropriations for the construction, repair, and preservation for certain public work on rivers and harbors, and for other purposes," approved July fifth, eighteen hundred and eighty-four.

Vol. 23, p.
147.
Ante, p. 415.

The Secretary of War is authorized and directed to appoint a board of three engineer officers of the United States Army, whose duty it shall be to thoroughly examine the Ohio river below Pittsburgh, as to the practicability of the improvement of the navigation of said river by means of movable dams; and said board shall report on or before the first Monday of December next, as to the feasibility and advisability of such project of improvement, the number of dams required, their location, with the cost of the same together with the cost of maintaining them after the completion of the project. The Secretary of War shall transmit said report to Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon.

Ohio River.
Board to re-
port on mov-
able dams.

The sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any money in the Treasury not otherwise appropriated to pay the expenses of said board and survey.

Expenses.

Improving Gauley River, West Virginia: For cleaning out channel, three thousand dollars.

Gauley Riv-
er, W. Va.

Improving New River, West Virginia: Continuing improvement from mouth of Wilson Creek to mouth of Greenbrier River, balance now available from former appropriations for improving New River, Virginia, is hereby directed to be spent in improving said river between Ivanhoe Furnace in Wythe County and mouth of Wilson Creek.

New River,
W. Va.

Improving Cape Fear River, North Carolina, above Wilmington: Continuing improvement, twelve thousand dollars.

Cape Fear
River, N. C.

To complete the improvement of Cape Fear River below Wilmington, North Carolina, two hundred and forty-five thousand dollars.

Improving Contentnia Creek, North Carolina: Continuing improvement, five thousand dollars.

Contentnia
Creek, N. C.

Improving Currituck Sound, Coanok Bay, and North River Bar, North Carolina, seven thousand five hundred dollars.

Currituck
Sound, etc., N.
C.

Improving Neuse River, North Carolina: Continuing improvement, fifteen thousand dollars.

Neuse River,
N. C.

Improving New River, North Carolina: Continuing improvement, three thousand dollars.

New River,
N. C.

Improving Pamlico and Tar Rivers from the mouths to the Falls at Rocky Mount, North Carolina: Continuing improvement, ten thousand dollars.

Pamlico and
Tar rivers, N.
C.

- Trent River, N. C. Improving Trent River, North Carolina: Continuing improvement, five thousand dollars.
- Lumber River, N. C. Improving Lumber River, North Carolina, five thousand dollars.
- Roanoke River, N. C. Improving Roanoke River, North Carolina, from its mouth to Clarksville, Virginia, forty thousand dollars.
- Yadkin River, N. C. Improving Yadkin River, North Carolina, ten thousand dollars.
- Edisto River, S. C. Improving Edisto River, South Carolina: Continuing improvement, five thousand dollars.
- Great Pee Dee River, S. C. Improving Great Pee Dee River, South Carolina: Continuing improvement, twenty thousand dollars.
- Salkehatchie River, S. C. Improving Salkehatchee River, South Carolina: Continuing improvement, three thousand dollars.
- Santee River, S. C. Improving Santee River, South Carolina: Continuing improvement, twenty-four thousand dollars.
- Waccamaw River, N. C. and S. C. Improving Waccamaw River, North and South Carolina, to Waccamaw Lake, North Carolina: Continuing improvement, fifteen thousand dollars.
- Wappoo Cut, S. C. Improving Wappoo Cut, South Carolina: Continuing improvement, five thousand dollars.
- Wateree River, S. C. Improving Wateree River, South Carolina: Continuing improvement, twelve thousand dollars: *Provided*, That no part of said appropriation shall be expended until the Wilmington, Columbia and Augusta Railroad Company, and the Camden branch of the South Carolina Railroad Company, shall have built suitable draw-spans in their bridges over said river, to be approved by the Secretary of War.
- Congaree River, S. C. *Provido*. Drawbridge. Improving Congaree River, South Carolina: Continuing improvement, seven thousand five hundred dollars: *Provided*, That no part of said appropriation shall be expended until the South Carolina Railroad Company shall have built a suitable draw-span in its bridge over said river, to be approved by the Secretary of War.
- Mingo Creek, S. C. Improving Mingo Creek or River, South Carolina, five thousand dollars.
- Clark Creek, S. C. Improving Clark Creek or River, South Carolina, two thousand five hundred dollars.
- Little Pee Dee River, S. C. Improving Little Pee Dee River, South Carolina, five thousand dollars.
- Altamaha River, Ga. Improving Altamaha River, Georgia: Continuing improvement, ten thousand dollars.
- Chattahoochee River, Ga. Improving Chattahoochee River, Georgia: Continuing improvement, twenty thousand dollars.
- Coosa River, Ga. and Ala. Improving Coosa River, Georgia and Alabama: Continuing improvement, sixty thousand dollars.
- Flint River, Ga. Improving Flint River, Georgia: Continuing improvement, twenty thousand dollars; of which sum five thousand dollars are to be expended between Albany and Montezuma, and fifteen thousand below Albany.
- Ocmulgee River, Ga. Improving Ocmulgee River, Georgia: Continuing improvement, fifteen thousand dollars.

Improving Oconee River, Georgia: Continuing improvement, twelve thousand five hundred dollars; a portion of which may be expended on said river between Skull Shoals and the Georgia railroad bridge. Oconee River, Ga.

Improving the Savannah River, Georgia, between the cities of Augusta and Savannah, completing the present project and commencing the extended project contained in the report of Engineer for year ending June thirtieth, eighteen hundred and eighty-seven, twenty-one thousand dollars. Savannah River, Ga.

Improving Jekyl Creek, Georgia, five thousand dollars. Jekyl Creek, Ga.

Romerly Marsh, Georgia: To pay for completing the existing project four thousand six hundred and thirty-three dollars and seventy-seven cents. Romerly Marsh, Ga.

Improving Apalachicola River, Florida: To maintain, two thousand dollars. Apalachicola River, Fla.

Improving Caloosahatchie River, Florida: To complete improvement of upper river, ten thousand dollars. Caloosahatchie River, Fla.

Improving Choctawatchie River, Florida and Alabama: Continuing improvement, ten thousand dollars. Choctawatchie River, Fla. and Ala.

Improving Escambia and Conecuh Rivers, Florida and Alabama: Continuing improvement, ten thousand dollars. Escambia and Conecuh rivers, Fla. and Ala.

Improving La Grange Bayou, Florida: To complete, three thousand dollars, including Holmes River to the town of Vernon. La Grange Bayou, Fla.

Improving Manatee River, Florida: Continuing improvement, five thousand dollars. Manatee River, Fla.

Improving Saint John's River, Florida, from Jacksonville to the ocean including the channel over the bar at the mouth, one hundred and seventy-five thousand dollars. St. Johns River, Fla.

Improving Suwanee River, Florida: Continuing improvement, fifteen thousand dollars; of which ten thousand dollars is to be expended in the purchase or construction of a suitable steam snag-boat with dredging and pile-driving machinery to be used on the rivers of the west coast of Florida. Suwanee River, Fla.

Improving Volusia Bar, Florida: To maintain, five hundred dollars. Volusia bar, Fla.

Improving Withlacoochee River, Florida: Continuing improvement, five thousand dollars. Withlacoochee River, Fla.

Improving Alabama River, Alabama: Continuing improvement, twenty thousand dollars. Alabama River, Ala.

Improving Black Warrior River, Alabama, from Tuscaloosa to Daniel's Creek: Continuing improvement, one hundred thousand dollars. Black Warrior River, Ala.

Improving Tallapoosa River, Alabama: Continuing improvement, seven thousand five hundred dollars. Tallapoosa River, Ala.

Improving Warrior River, below Tuscaloosa, Alabama: Continuing improvement, eighteen thousand dollars. Warrior River, Ala.

Improving Tombigbee River, Alabama, from Walker's Bridge to Fulton, four thousand dollars. Tombigbee River, Ala.

Improving Tombigbee River, Alabama, from Fulton

to Vienna: Continuing improvement, six thousand five hundred dollars.

Improving Tombigbee River, Alabama, below Vienna: To complete improvement, six thousand dollars.

Big Sunflower River, Miss. Improving Big Sunflower River, Mississippi: Continuing improvement, five thousand dollars; of which two thousand dollars to be expended between Woodburn and Lehrton.

Noxubee River, Miss. Improving Noxubee River, Mississippi: Continuing improvement, five thousand dollars.

Pascagoula River, Miss. Improving Pascagoula River, Mississippi: Continuing improvement, twenty-seven thousand dollars, including bar at the mouth and from there to the mills at Moss Point.

Pearl River, Miss. Improving Pearl River, Mississippi, between Edinburgh and Carthage: Continuing improvement, five thousand dollars.

Improving Pearl River, Mississippi, between Carthage and Jackson: Continuing improvement, two thousand five hundred dollars.

Improving Pearl River, Mississippi, below Jackson, fifteen thousand dollars; of which five thousand shall be used for dredging at the mouth.

Steele Bayou, Miss. Improving Steele's Bayou, Mississippi, including Washington Bayou: Continuing improvement, two thousand five hundred dollars.

Tallahatchie River, Miss. Improving Tallahatchie River, Mississippi: Continuing improvement, five thousand dollars.

Tchula Lake, Miss. Improving Tchula Lake, Mississippi: Continuing improvement, three thousand dollars.

Yazoo River, Miss. Improving Yazoo River, Mississippi: Continuing improvement, thirty-two thousand dollars; of which ten thousand shall be used in repairing snag-boat Meigs, and eight thousand for constructing a pumping dredge-boat.

Amite River, La. Improving Amite River, Louisiana: Continuing improvement, five thousand dollars; of which two thousand five hundred may be used in improving Bayou Manchac [Manchac].

Bœuf River, La. Improving Bœuf River, Louisiana: Continuing improvement and closure of outlets, six thousand dollars.

Bayou Bartholomew, La. and Ark. Improving Bayou Bartholomew, Louisiana and Arkansas: Continuing improvement, five thousand dollars.

Bayou Courtableau, La. Improving Bayou Courtableau, Louisiana: Continuing improvement, five thousand dollars.

Bayou D'Arbonne, La. Improving Bayou D'Arbonne, Louisiana: Continuing improvement, two thousand dollars.

Bayou Terrebonne, La. Improving Bayou Terre Bonne, Louisiana: To complete, three thousand dollars.

Red River, La. Improving Red River, Louisiana: For completion of survey from Fulton, Arkansas, to the Atchafalaya River, thirty-five thousand dollars.

Tensas River and Bayou Macon, La. Improving Tensas River and Bayou Macon, Louisiana: Continuing improvement, five thousand dollars.

Improving Red River, Louisiana and Arkansas: Continuing improvement from Fulton, Arkansas, to Atchafalaya River, including completing the work at Alexandria, sixty-five thousand dollars; of which five thousand dollars, or so much thereof as may be necessary, to be used upon Cypress Bayou and the lakes between Shreveport, Louisiana, and Jefferson, Texas; and five thousand dollars or so much thereof as may be necessary, upon Bayou Dorcheat.

Red River,
La. and Ark.

Improving Ouachita and Black River, Arkansas and Louisiana: Continuing improvement, twenty thousand dollars; of which four thousand five hundred dollars is authorized to be expended for the construction or purchase of a crane-boat with steam power.

Ouachita and
Black rivers,
Ark. and La.

Improving Tickfaw River and its navigable tributaries, Louisiana: Continuing improvement, one thousand dollars.

Tickfaw Riv-
er, La.

Improving Little River [^a], Louisiana, two thousand five hundred dollars.

Little River,
La.

Improving Bayous Rondeway and Vidal, Louisiana, by removing obstructions, one thousand dollars.

Bayous Ron-
deway and Vi-
dal, La.

Improving Calcasieu River and Passes, Louisiana: Continuing improvement at the entrance to said river and pass, ten thousand dollars.

Calcasieu
River, La.

Improving Bayou Plaquemine, Louisiana: For securing a navigable channel sixty feet wide and six feet in depth, from deep water up to the Plaquemine Dike, and for securing the mouth of the bayou from further caving, one hundred thousand dollars, pursuant to plan recommended by the engineers.

Bayou Pla-
quemine, La.

Improving Bayou Lafourche, Louisiana, pursuant to the project of Lieutenant O. T. Crosby, Corps of Engineers, dated June eleventh, eighteen hundred and eighty-six, fifty thousand dollars, including immediate dredging to secure low water navigation.

Bayou La-
fourche, La.

Improving Buffalo Bayou, Texas: Continuing improvement, twenty-five thousand dollars.

Buffalo Bay-
ou, Tex.

Improving Trinity River, Texas: Continuing improvement, twelve thousand five hundred dollars.

Trinity Riv-
er, Tex.

Improving Arkansas River, Arkansas: Continuing improvement, one hundred and fifty thousand dollars: *Provided*, That nothing herein contained shall authorize the Secretary of War to enter upon the project of improvement of said river as set forth in the report of the Board of Engineers on improvement of the Arkansas River from Wichita, Kansas, to its mouth, dated New York City, March sixteenth, eighteen hundred and eighty-eight, and contained in House Executive Document Number Two hundred and thirty-four, first session, Fiftieth Congress: *Provided*, That the Secretary of War shall expend the appropriation under this head with reference to the final improvement of this river as contemplated

Arkansas Riv-
er, Ark.
Provided.

Scope of im-
provement.

^a A tributary of Black River.

- in the report of the Chief of Engineers for the year ending July first, eighteen hundred and eighty-five, and as authorized in the act for the improvement of rivers and harbors approved August fifth, eighteen hundred and eighty-six, and in House Executive Document number ninety, Forty-ninth Congress, first session; said methods to be applied, as the Secretary of War may direct, at such points between Wichita, Kansas, and the navigable mouth of the Arkansas River, at its junction with the Mississippi River, as he may deem for the best interest of commerce. And all moneys now to the credit of different sections of the Arkansas River, other than appropriations for the operating of snag boats, shall be available for use under this head; and in future the engineer in charge of this work and the Secretary of War shall make report upon the progress and needs of this work under this head, instead of reporting upon disconnected projects, as heretofore. Nothing herein contained shall be understood to prevent the Secretary of War from applying any part or all of the funds previously appropriated for use at Fort Smith, Dardanelle, in Pine Bluff Reach, or from expending not exceeding four thousand dollars to remove the bar in front of Van Buren, or from allotting not exceeding eight thousand dollars as a contingent fund for the expenditure in Pine Bluff Reach.
- Reports.**
- St. Francis River, Ark.** Improving Saint Francis River, Arkansas: Continuing improvement, four thousand dollars.
- Arkansas River, Ark.** Improving Arkansas River, Arkansas: For removing obstructions, twenty-five thousand dollars, of which ten thousand dollars is authorized to be used in constructing a new hull for the snag boat Wichita, including capstans and the transfer of the upper works, and three hundred and seventy-five dollars in completing survey and maps.
- Red River, Ark.** Improving Red River, Arkansas: To complete improvement above Fulton, three thousand dollars.
- Black River, Ark. and Mo.** Improving Black River, Arkansas and Missouri: Continuing improvements, five thousand dollars.
- Little Red River, Ark.** Improving Little Red River, Arkansas: Continuing improvement, five thousand four hundred dollars; a portion of which is authorized to be expended in the purchase or construction of a dredge-boat suitable for the work of the river.
- Petit Jean River, Ark.** Improving Petit Jean River, Arkansas: Continuing improvement, below the iron bridge at the Rocky Crossing, two thousand five hundred dollars.
- White River, Ark.** Improving White River, Arkansas: Continuing improvement, twenty-five thousand dollars.
- Ouachita River, Ark.** Improving Ouachita River, Arkansas, above Camden: To complete, nine thousand dollars.
- Cache River, Ark.** Improving Cache River, Arkansas, seven thousand dollars; three thousand dollars of which shall be expended for the building and equipping of a small hand-propelled snag-boat, and four thousand dollars for running ex-

penses of the same, in accordance with the recommendation of the engineer in charge.

Improving Big Hatchee River, Tennessee: Continuing improvement, five thousand dollars. Hatchee River, Tenn.

Improving Caney Fork River, Tennessee: Continuing improvement, two thousand five hundred dollars. Caney Fork River, Tenn.

Improving Clinch River, Tennessee: Continuing improvement, five thousand dollars. Clinch River, Tenn.

Improving Cumberland River, Tennessee and Kentucky: Continuing improvement above Nashville, two hundred thousand dollars; with a view to secure a uniform depth in the channel of four feet, commencing with a lock at or near the lower island at Nashville. Cumberland River, Tenn. and Ky.

Improving Cumberland River, Tennessee and Kentucky, below Nashville: Continuing improvement, ten thousand dollars.

Improving French Broad River, Tennessee: Continuing improvement, ten thousand dollars. French Broad River, Tenn.

Improving Hiwassee River, Tennessee: Continuing improvement, one thousand dollars. Hiwassee River, Tenn.

Improving Forked Deer River, Tennessee: Continuing improvement, four thousand five hundred dollars for the North Fork, below Dyersburgh; two thousand five hundred for South Fork; and two thousand five hundred for main river below. Forked Deer River, Tenn.

Improving Tennessee River, above Chattanooga, Tennessee: Continuing improvement, fifteen thousand dollars. Tennessee River, Tenn.

Improving Tennessee River, below Chattanooga, Tennessee: Continuing improvement, two hundred and fifty thousand dollars; of which as much as may be necessary is authorized to be expended in acquiring by purchase or condemnation the land needed for the sites of the permanent buildings necessary in the management of the canals at the improved shoals.

Improving Kentucky River, Kentucky: Continuing improvement, one hundred and eighty thousand dollars. Kentucky River, Ky.

Improving Licking River, Kentucky, from Farmer's to West Liberty, three thousand dollars. Licking River, Ky.

Improving Tradewater River, Kentucky: To complete improvement, six thousand dollars. Tradewater River, Ky.

For the purchase of the improvements known as the Green and Barren River improvements, one hundred and thirty-five thousand dollars: *Provided*, That no part of said sum shall be expended until a full and absolute conveyance of said improvements, together with rights of way, easements, piers, docks, and appurtenances of every nature belonging to or connected with said improvements, by the owner or owners thereof, and the Attorney-General of the United States shall have certified to the Secretary of War that the title is perfect. Green and Barren River improvements. *Provided*. Title.

Improving the Ohio River: Continuing improvement, three hundred and eighty thousand dollars; of which sum, twenty-five thousand dollars, or so much thereof Ohio River. Distribution.

as may be necessary, shall be expended in removing the rock obstruction at the mouth of Licking River, twenty thousand dollars, or so much thereof as may be necessary, shall be expended for the construction of a drift-gap at Davis Island Dam, with the necessary bear-trap gates and masonry walls, and seven thousand five hundred dollars in constructing an ice pier pursuant to the present or prospective plan of the Chief of Engineers, at or near Portsmouth, Ohio: *Provided*, That the Secretary of War is hereby authorized and directed to obtain, if he can do so without cost to the United States, a perpetual lease or conveyance of the riparian rights of the property owners at said locality, in the event said ice-pier shall be located where there is no landing place: *And provided further*, That at said locality, if it be an improved landing, he shall first obtain a relinquishment of wharfage rights and dues in favor of water craft seeking protection from damage by ice; and no part of this appropriation shall be used for such purpose until the foregoing conditions are complied with; and two thousand five hundred dollars of said Ohio River appropriation may be used for improving the channel in the mouth of the Big Hocking River below the first dam therein; and twenty thousand dollars of said Ohio River appropriation may be used for harbor improvement at Madison, Indiana, according to the plans heretofore submitted by Lieutenant Colonel Merrill, Corps of Engineers; also out of said Ohio River appropriation the sum of fifteen thousand dollars may be expended in completing the construction of the embankment on the south side of the Great Miami River near its junction with the Ohio, to confine the waters of the Great Miami in great floods to the general course of its channel at or near the Ohio, to the end that the formation of the bar in the Ohio now obstructing navigation may be arrested; also out of said Ohio River appropriation the sum of fifteen thousand dollars may be expended in the construction, or aiding in the construction, of such an embankment at Shawneetown, Illinois, as will confine the waters of the river in great floods to the general course of its channel, and protect the harbor; and thirty thousand dollars of said sum of three hundred and eighty thousand dollars may be expended in protecting the harbor at Cairo, Illinois, in the discretion of the Secretary of War, if in the opinion of the Secretary of War the interests of commerce require it.

Falls of the Ohio.

Improving the falls of the Ohio River: Continuing improvement, according to the last plan of the engineer in charge, one hundred and fifty thousand dollars; of which sum twenty-five thousand shall be used in enlarging the canal basin near the locks at Louisville, Kentucky, as recommended in the Engineer's Report of eight hundred and eighty-five, page one thousand eight hundred and four.

Provisos.

Ice piers.

Vol. 32, p.
359.
Post, p. 988.

Improving Indiana Chute Fall, Ohio River: Continuing improvement, fifteen thousand dollars. Indiana Chute.

Improving Muskingum River, Ohio: For the construction of a lock at Taylorsville and the reconstruction of the lock at Zanesville, pursuant to the report of the engineers, one hundred and two thousand dollars; and the Secretary of War is hereby authorized and empowered to grant leases or licenses for the use of the water powers on the Muskingum River at such rate and on such conditions and for such periods of time as may seem to him just, equitable, and expedient: *Provided*, That the leases or licenses shall be limited to the use of the surplus water not required for navigation. And he is also empowered to grant leases or licenses for the occupation of such lands belonging to the United States on said Muskingum River as may be required for mill-sites or for other purposes not inconsistent with the requirements of navigation; and all moneys received under such leases or licenses shall be turned into the Treasury of the United States, and the itemized statement thereof shall accompany the annual report of the Chief of Engineers. Muskingum River, Ohio.

Proviso.
Water-power rights.

But nothing in this act shall be construed to affect any vested right, if such there be, of any lessee of water power on said river. Vested rights.

Improving Detroit River, Michigan: To complete, one hundred and thirty thousand and five hundred dollars. Detroit River, Mich.

Improving Hay Lake Channel, Michigan: Continuing improvement, five hundred thousand dollars: *Provided*, That any portion, or all of this sum may, in the discretion of the Secretary of War, be used in the work at the falls of the Saint Mary's River, in addition to the specific appropriation herein made for the latter. Hay Lake channel, Mich.
Proviso.

Improving Saginaw River, Michigan: Continuing improvement, sixty-five thousand dollars, of which twenty-five thousand dollars are to be used above Bay City, and fifteen thousand dollars in improving the west channel along West Bay City. Saginaw River, Mich.

Improving Saint Clair Flats Ship Canal, Michigan: Continuing improvement, seventy-five thousand dollars; all or any portion of which may, in the discretion of the engineer, be expended in dredging Grosse Pointe Channel. St. Clair Flats Canal.

Improving Saint Mary's River, at the Falls, Michigan: Continuing improvement on new lock, dam, and approaches, one million dollars. St. Marys River, Mich.

Improving Clinton River, Michigan: Continuing improvement, ten thousand dollars; and the Secretary of War be, and is hereby, authorized to accept for the United States a conveyance of the parcel of land known as "Shoemaker's Bend," as per warranty deed from city of Mount Clements to United States, under date of December twenty-ninth, eighteen hundred and eighty-seven, amounting to six and three-quarter acres, for the purpose of straightening the channel of Clinton River. Clinton River, Mich.

- St. Joseph River, Mich. Improving Saint Joseph River, Michigan, from its mouth to Berrien Springs, two thousand five hundred dollars.
- Black River, Mich. Improving mouth of Black River [^a], Michigan, ten thousand dollars.
- Rouge River, Mich. Improving Rouge River, Michigan, at its junction with Detroit River, and up the river as far as the bridge of Saint Louis and Wabash Railroad, ten thousand dollars.
- Chippewa River, Wis. Improving Chippewa River, including Yellow Banks, in said river, Wisconsin: Continuing improvement, ten thousand dollars.
- Fox River, Wis. Improving Fox River, Wisconsin, below Montello, except as hereinafter provided: Continuing improvement, one hundred thousand dollars; of this sum five thousand dollars, or so much thereof as may be necessary, shall be used for deepening the south outlet of Lake Winnebago, at Neenah, Wisconsin, so as to make navigation practicable during low water season; six thousand dollars, or so much thereof as may be necessary, shall be expended in constructing a levee at Portage, Wisconsin, to prevent the overflow of the Wisconsin River into the Upper Fox River.
- Levee at Portage, Wis. Vol. 24, p. 325. *Ante*, p. 455. The sum of six thousand dollars, appropriated by the river and harbor act of August fifth, eighteen hundred and eighty-six, for a levee at Portage, Wisconsin, shall be available for that purpose; the sum of ten thousand dollars, appropriated by the river and harbor act of July fifth, eighteen hundred and eighty-four, "to be used in maintaining a channel between DePere and Green Bay, Wisconsin," shall be used, as soon as practicable, on the Lower Fox River, in buoying, straightening, and further deepening the channel of said river, between said cities.
- Channel between Depere and Green Bay. Vol. 23, p. 143. *Ante*, p. 409. Improving Saint Croix River, Wisconsin and Minnesota: Continuing improvement, ten thousand dollars.
- St. Croix River, Wis. and Minn. Improving Red River of the North, Minnesota: Continuing improvement, twenty thousand dollars.
- Red River of the North, Minn. Improving Minnesota River, Minnesota, including protecting and holding the banks opposite the borough of Belle Plaine, so as to prevent the river from cutting through the narrow neck of land at that point and thereby changing its channel and course, ten thousand dollars.
- Minnesota River, Minn. Vol. 27, p. 106. *Post*, p. 638. Improving Wabash River, Indiana and Illinois, above Vincennes: Continuing improvement, five thousand dollars.
- Wabash River, Ind. and Ill. Improving Wabash River, Indiana and Illinois, below Vincennes: Continuing the work on lock and dam at Grand Rapids, near Mount Carmel, Illinois, fifty thousand dollars, and for continuing improvements, including the work at or near Grayville, ten thousand dollars.

^a Empties into St. Clair River.

Improving White River, Indiana: Continuing improvement, five thousand dollars; no part of which is to be expended until the bridges are so changed as not to obstruct navigation.

White River,
Ind.
Vol. 26, p.
448.
Post, p. 574.

Improving Calumet River, Illinois and Indiana: Continuing improvement, fifty thousand dollars; of which fifteen thousand is to be used in improving the river above the Forks to one-half mile east of Hammond, and thirty-five thousand for the improvement of the river between its mouth and One hundred and eighth street.

Calumet
River, Ill. and
Ind.

The amount heretofore appropriated for the improvement of said Calumet River from its mouth to its Forks, or so much thereof as may be necessary, shall be immediately available for the improvement between its mouth and One hundred and eighth street, anything in the act of July fifth, eighteen hundred and eighty-four and August fifth, eighteen hundred and eighty-six to the contrary notwithstanding.

Vol. 23, p.
143.
Ante, p. 409.
Vol. 24, p.
325.
Ante, p. 456.

Improving Illinois River, Illinois: Continuing improvement, two hundred thousand dollars. And for the purpose of securing a continuous navigable water-way between Lake Michigan and the Mississippi River, having capacity and facilities adequate for the passage of the largest Mississippi River steam-boats, and of naval vessels suitable for defense in time of war, the Secretary of War is authorized and directed to cause to be made the proper surveys, plans, and estimates for a channel improvement and locks and dams in the beds of the Illinois and Desplaines Rivers from La Salle to Lockport, so as to provide a navigable water-way, not less than one hundred and sixty feet wide, and not less than fourteen feet deep, and to have surveyed and located a channel from Lockport to Lake Michigan, at or near the city of Chicago, such channel to be suitable for the purposes aforesaid; the necessary expenses of such surveys, estimates, plans, and location to be paid out of the sum herein appropriated for the improvement of the Illinois River.

Illinois and
Des Plaines
rivers, Ill.
Survey for
waterway from
Lake Michigan
to Mississippi
River.

The Secretary of War is further authorized and directed to cause to be located, on such line as he may approve, a canal from the Illinois River at or near the town of Hennepin to the Mississippi River at or above the mouth of Rock River, together with a necessary feeder for the same, said canal to be known as the Illinois and Mississippi Canal, and to be eighty feet wide at the water line, and to have a depth of not less than seven feet of water, with locks one hundred and seventy feet long and thirty feet wide. The Secretary of War shall cause to be made and submitted to Congress detailed plans and estimates for the construction of said canal and feeder; the necessary expense of making such location, plans, and estimates shall be paid out of the unexpended balance on hand

Location and
plans for Illi-
nois and Mis-
sissippi Canal.

heretofore appropriated for the survey of said canal by the River and Harbor act approved August fifth, eighteen hundred and eighty-six, for the examination of said canal, and of the Illinois and Michigan canal by a board of Engineers.

Vol. 24, p. 326.
Ante, p. 456.

Mississippi
River.
Storage res-
ervoirs.

For continuing operations upon the reservoirs at the headwaters of the Mississippi River, twelve thousand dollars, to be expended in accordance with the recommendation of the Board of Engineers in their report to the Chief of Engineers, dated May twenty-fourth, eighteen hundred and eighty-seven. And it shall be the duty of the Secretary of War to prescribe such rules and regulations in respect to the use and administration of said reservoirs as in his judgment the public interest and necessity may require; which rules and regulations shall be posted in some conspicuous place or places for the information of the public. And any person knowingly and willfully violating such rules and regulations shall be liable to a fine not exceeding five hundred dollars, or imprisonment, not exceeding six months, the same to be enforced by prosecution in any district court of the United States within whose territorial jurisdiction such offense may have been committed. And the Secretary of War shall cause such gaugings to be made at or near Saint Paul during the annual operation of said reservoirs as shall determine accurately the discharge at that point, the cost of same to be paid out of the annual appropriation for gauging the waters of the Mississippi River and its tributaries.

Regulations.

Gauging at
St. Paul.
Vol. 25, pp.
421, 424.
Post, pp.
512, 516.

Mississippi
River.
Snags, etc.
Vol. 25, p. 424.
Post, p. 516.
Above St. An-
thonys Falls.

For operating snag-boats and dredge-boats on Upper Mississippi River, twenty-five thousand dollars.

Improving the Mississippi River above Saint Anthony's Falls, ten thousand dollars.

Minneapolis
to Des Moines
Rapids.

Improving the Mississippi River from the landing on the west bank below the Washington avenue bridge, Minneapolis, to the Des Moines Rapids, including work for the protection of the bank of the Mississippi River at Winona, Minnesota, on account of the erosion caused by dams erected above the city to improve the navigation of the river, and the examination and survey at the Rock Island Rapids in said river hereinafter mentioned: Continuing improvement, six hundred thousand dollars.

Rock Island
Rapids.
Examination.

And inasmuch as the present channel of the Mississippi River at the Rock Island Rapids is said to be of insufficient width and depth, and dangerous to the navigation of said river, the Secretary of War is hereby authorized and directed to cause an examination and survey to be made at said rapids, with the view of determining the best and most economical mode of securing a safer channel of greater width and depth, sufficient to meet the necessities of the commerce and navigation of the river, either by the construction of a canal around said rapids on the Illinois side of said river, from the head of the rapids near Rapids City, Illinois, on the most direct and feasible route to

the main river, at the foot of said rapids, or by widening and deepening the present channel of the river at said rapids. And the Secretary of War shall cause a report of said examination and survey to be made to Congress at its next session, together with plans and estimates of the probable cost for the construction of such canal, or for the widening and deepening of the present navigable channel of the river, and with such plans and estimates, shall submit his opinion as to the best and most economical plan of improving the river at said rapids in the interest of the commerce and navigation of the river, and for the purpose of such examination and survey, so much of the above appropriation of six hundred thousand dollars as may be necessary is hereby authorized to be expended, not to exceed fifteen thousand dollars.

Report.

Des Moines
Rapids Canal.

Improving the Mississippi River at Des Moines Rapids Canal, under the modified project, thirty-five thousand dollars; and the Secretary of War is hereby authorized and directed to use so much of the money appropriated in the acts of July fifth, eighteen hundred and eighty-four, and August fifth, eighteen hundred and eighty-six, for the construction of a pier at the outer wall of the Des Moines Rapids Canal as may be necessary in the establishment of a floating boom, connecting said wall with the upper draw rest of the bridge at Keokuk, if in his opinion such work would adequately and advantageously serve the interests of navigation; and the balance left over of said appropriations of eighteen hundred and eighty-four and eighteen hundred and eighty-six, if any, to be used in continuing the improvement of the Des Moines Rapids under present project.

Vol. 23, p.
146.
Ante, p. 412.
Vol. 24, p.
328.
Ante, p. 460.

Improving Mississippi River from Des Moines Rapids to the mouth of Illinois River, two hundred thousand dollars, including the removal of bars at the mouth of Cedar Creek, in Quincy Bay, dredging in said bay; opening Willow Slough, and removing the bars at the mouth of Whipple Creek and Hamburg Bay, if in the opinion of the Secretary of War the same is deemed advisable in the interest of commerce and navigation; and fifty thousand dollars of said sum, or so much thereof as may be necessary may be expended in improving and strengthening Sny Island Levee where it crosses Sincarte Slough and other sloughs, and in repairing wash outs in said levee.

To mouth of
Illinois River.

Improving dry-dock at Des Moines Rapids: To complete, sixteen thousand two hundred and fifty dollars.

Dry dock,
Des Moines
Rapids.

Improving the Mississippi River from the mouth of the Illinois River to the mouth of the Ohio River, including the completion of the work at Alton, and at the discretion of the Secretary of War, the protection of the Illinois shore opposite the mouth of the Missouri River and the improvement of Saint Louis harbor: Continuing improvement, three hundred thousand dollars.

To mouth of
Ohio River.

Head of
Passes to Ohio
River.

Improving Mississippi River from head of the Passes to the mouth of the Ohio River: Continuing improvement, two million dollars; which sum shall be expended under the direction of the Secretary of War in accordance with the plans, specifications, and recommendations of the Mississippi River Commission: *Provided*, That no portion of this appropriation shall be expended to repair or build levees for the purpose of reclaiming lands or preventing injury to lands or private property by overflows: *Provided, however*, That the Commission is authorized to repair and build levees if in their judgment it should be done as part of their plans to afford ease and safety to the navigation and commerce of the river and to deepen the channel. Of the foregoing sum one hundred and fifty thousand dollars, or so much thereof as shall be necessary, shall be expended in protecting the bank along the Lake Bolivar front, by revetment.

Provisos.

Levees.

Protecting
navigation.

Survey.

For survey of the Mississippi River from the head of the passes to its headwaters: Continuing survey, seventy-five thousand dollars.

Snags, etc.
Vol. 25, p.
424.
Post, p. 516.

For continuing the removal of snags, wrecks, and other obstructions in the Mississippi River, one hundred thousand dollars.

For work in accordance with the plans and specifications of the Mississippi River Commission:

Columbus,
Ky.

At Columbus, Kentucky: Continuing improvement, twenty-five thousand dollars.

Hickman, Ky.

At Hickman, Kentucky: Continuing improvement, seventy thousand dollars.

Helena, Ark.

At Helena, Arkansas, seventy-five thousand dollars.

Greenville,
Miss.

At Greenville, Mississippi: Continuing improvement, seventy-five thousand dollars.

Vicksburg,
Miss.

At Vicksburg, Mississippi: Continuing improvement, one hundred and fifty thousand dollars.

New Orleans,
La.

At New Orleans, Louisiana: Continuing improvement, two hundred thousand dollars.

Atchafalaya
and Red rivers.

At the head of the Atchafalaya and mouth of Red River, Louisiana, for rectification thereof, by preventing further enlargement of the Atchafalaya and restricting its outlet capacity, and for turning the waters of Red River into the north or upper channel around Turnbull's Island; and for keeping open a navigable channel through the mouth of Red or Old River into the Mississippi, two hundred and fifty thousand dollars.

Gauging.
Vols. 16, p.
598; 25, pp.
420, 424; 32,
p. 374. *Ante*,
pp. 189, 510;
post, pp. 516,
1009.

For gauging the waters of the Lower Mississippi River and its tributaries as provided for in joint resolution of twenty-first of February, eighteen hundred and seventy-one, nine thousand six hundred dollars [*a*]: *Provided*,

^a On April 21, 1891, the Secretary of War decided, after inquiry at the Treasury Department, that under the provisions of section 6 of this act, the amount of the permanent annual appropriation provided therein for such gauging did not exceed \$6,000. Section 9 of the river and harbor act approved June 13, 1902, increases this limit to \$9,600 annually.

That three thousand six hundred dollars of same is authorized to be expended in paying the expenses of gauging the said waters during the fiscal year ending June thirtieth, eighteen hundred and eighty-eight.

Proviso.
Deficiency.

For examinations and surveys at South Pass, mouth of Mississippi River, pursuant to the act of March third, eighteen hundred and seventy-five, ten thousand dollars.

South Pass.
Vols. 18, p.
464; 25, p. 424;
32, p. 340.
Ante, p. 246;
post, pp. 516,
962.
Gasconade
River, Mo.

Improving Gasconade River, Missouri: Continuing improvement, five thousand dollars.

Improving Little River, Missouri, from Hornersville to its junction with the Saint Francis River, five thousand dollars.

Little River,
Mo.

Improving Osage River, Missouri: Continuing improvement, five thousand dollars.

Osage River,
Mo.

Improving Saint Francis River, Missouri, from Greenville to the Arkansas State line, five thousand dollars.

St. Francis
River, Mo.

Improving Black River, Missouri, seven thousand dollars.

Black River,
Mo.

Improving Missouri River from mouth to Fort Benton: Continuing improvement, one million dollars, including removal of obstructions, surveys, and examinations, to be expended under the direction of the Secretary of War, in accordance with the plans, specifications, and recommendations of the Missouri River Commission, except as herein modified.

Missouri
River.

Out of the above sum the following amounts shall be applied to the purposes hereinafter specified, namely: One hundred and fifty thousand dollars, or so much thereof as may be needed, shall be expended on that portion of the Missouri River lying between the cities of Council Bluffs, Iowa, and Omaha, Nebraska, and a point five miles above the bridge of the Omaha and Council Bluffs Bridge Company, by the course of said river; that the sum of one hundred thousand dollars, or so much thereof as may be needed, shall be expended on said river at Sioux City, Iowa, and in Nebraska, opposite said city; that the sum of fifty thousand dollars, or so much thereof as may be needed, shall be expended on said river at or near Plattsmouth, Nebraska; that the sum of fifty thousand dollars, or so much thereof as may be needed, shall be expended on said river at or near Rulo, Nebraska; that the sum of seventy-five thousand dollars, or so much thereof as may be needed, shall be expended on said river at or near Nebraska City, Nebraska; that the sum of sixty-five thousand dollars, or so much thereof as may be necessary, shall be expended on said river at or near Kansas City, Missouri; that the sum of sixty-five thousand dollars, or so much thereof as may be necessary, shall be expended on said river at or near Saint Joseph, Missouri; that the sum of forty-five thousand dollars, or so much thereof as may be necessary, shall be expended on said

Distribution.

river at or near Arrow Rock, Missouri; that the sum of seventy-five thousand dollars, or so much thereof as may be necessary, shall be expended on said river at or near Leavenworth, Kansas; that the sum of seventy-five thousand dollars, or so much thereof as may be necessary, shall be expended on said river at or near Atchison, Kansas; and that the sum of twenty-five thousand dollars, or so much thereof as may be necessary, shall be expended on said river at or near Miami, Missouri.

Mokelumne River, Cal.

Improving Mokelumne River, California: Removing obstructions, two thousand dollars.

Sacramento and Feather rivers, Cal.

Improving Sacramento and Feather Rivers, California: Continuing improvement, twenty thousand dollars; to be expended for snagging and dredging operations.

Vol. 26, p. 668.
Post, p. 540.
Napa River, Cal.

Improving Napa River, California, seven thousand five hundred dollars.

San Joaquin River, Cal.

Improving San Joaquin River, California: Continuing improvement, twenty-five thousand dollars; a portion of which may be used, in the discretion of the engineer, in closing Laird's Slough and in making the partial closure of what is called "Paradise Cut."

Petaluma Creek, Cal.

Improving Petaluma Creek, California: Continuing improvement, two thousand dollars.

Columbia River, Oreg.

Improving canal at the Cascades, Oregon: Continuing improvement, three hundred thousand dollars.

Improving Upper Columbia River, including Snake River, Oregon and Washington Territory: Continuing improvement, ten thousand dollars.

Improving the mouth of the Columbia River, Oregon: Continuing improvement, five hundred thousand dollars.

Lower Willamette and Columbia rivers.

Improving Lower Willamette and Columbia Rivers in front of and below Portland, Oregon: Continuing improvement, one hundred thousand dollars, of which sum, one thousand dollars, or so much thereof as may be necessary, may be expended in dredging the bar at Skamokawa, on the Columbia River.

Willamette River, Oreg.

Improving Willamette River above Portland, Oregon: Continuing improvement, twenty-nine thousand dollars, of which sum fourteen thousand dollars, if deemed necessary by the Secretary of War, may be expended in revetting the Willamette River, above Corvallis, to prevent the threatened change in the channel of the river at said point.

Coquille River, Oreg.

Improving Coquille River, Oregon: Continuing improvement, twenty-five thousand dollars; of which five thousand dollars is authorized to be expended for snagging between Coquille City and Myrtle Point.

Umpqua River, Oreg.

Improving Umpqua River, Oregon: To complete, two thousand dollars.

Columbia River, Oreg., gauging.

Gauging waters of the Columbia River, Oregon: For fiscal years ending June thirtieth, eighteen hundred and eighty-eight, and June thirtieth, eighteen hundred and eighty-nine, two thousand five hundred dollars.

Improving Chehalis River, Washington Territory: Continuing improvement, two thousand dollars. Chehalis River, Wash.

Improving Cowlitz River, Washington Territory: Continuing improvement, three thousand dollars. Cowlitz River, Wash.

Improving Skagit, Stilaquamish, Nootsack, Snohomish and Snoqualmie Rivers, Washington Territory: Continuing improvement, fifteen thousand dollars; of which five thousand dollars shall be used for a snag-boat and outfit. Skagit, Stilaquamish, Nootsack, Snohomish, and Snoqualmie rivers, Wash.

SEC. 2. That whenever complaint shall be made to the Secretary of War that by reason of the placing in any navigable waters of the United States of any bridge pier or abutment, the current of such waters has been so deflected from its natural course as to cause by producing caving of banks or otherwise serious damage or danger to property, it shall be his duty to make inquiry, and if it shall be ascertained that the complaint is well founded, he shall cause the owners or persons operating such bridge to repair such damage or prevent such danger to property by such means as he shall indicate and within such time as he may name, and in default thereof the owners or persons operating such bridge shall be liable in any court of competent jurisdiction to the persons injured in a sum double the amount of said injury: *Provided, however,* That nothing herein contained shall be construed so as to affect any rights of action which may exist at the time of the passage of this act [a]. Deflection of currents by piers, etc. Vol. 26, p. 454. Post, p. 582. Vol. 27, p. 110. Post, p. 642. Vol. 30, p. 1151. Post, p. 886.

SEC. 3. That it shall be the duty of the Secretary of War to apply the money herein and hereafter appropriated for improvements of rivers and harbors, other than surveys, estimates and gaugings, in carrying on the various works, by contract or otherwise, as may be most economical and advantageous to the Government. Where said works are done by contract [b], such contract shall be made after sufficient public advertisement for proposals, in such manner and form as the Secretary of War shall prescribe; and such contracts shall be made with the lowest responsible bidders, accompanied by such securities as the Secretary of War shall require, conditioned for the faithful prosecution and completion of the work according to such contract. Application of appropriations. Contracts. Vol. 26, p. 452. Post, p. 580.

SEC. 4. That for the purpose of securing the uninterrupted examinations and surveys at the South Pass of the Mississippi River, as provided for in the act of March third, eighteen hundred and seventy-five, the Secretary of War, upon the application of the Chief of Engineers, is Surveys at South Pass, Mississippi River. Appropriation made permanent.

^a This section is amended by the river and harbor acts approved Sept. 19, 1890 (sec. 7), July 13, 1892 (sec. 3), and Mar. 3, 1899.

^b Section 2 of the river and harbor act approved Sept. 19, 1890, provides that nothing in the above section 3 shall be so construed as to prohibit or prevent the cumulation of two or more works of river and harbor improvement in the same proposal and contract where such works are in the same region and of the same kind or character.

Vols. 18, p. 464; 25, 422; 32, p. 340. *Ante*, pp. 246, 513; *post*, p. 962.

Proviso.
Report.

Regulations
for navigation
of South Pass.
Vol. 26, p. 452.
Post, p. 580.

Punishment
for violation.

Gauging wa-
ters of lower
Mississippi
River.
Appropriation made
permanent.

Vol. 16, p. 598.
Ante, p. 189.
Vol. 25, pp. 420, 421.
Ante, pp. 510, 512.
Vol. 32, p. 374.
Post, p. 1009.

Proviso.
Report.

Snag boats,
etc., Missis-
sippi River.

Appropriation
for, made
permanent.
Vol. 25, pp. 420, 421.
Ante, pp. 510, 512.

hereby authorized to draw his warrant or requisition from time to time upon the Secretary of the Treasury for such sums as may be necessary to do such work, not to exceed in the aggregate for each year the amount appropriated in this act for such purpose: *Provided, however*, That an itemized statement of said expenditures shall accompany the Annual Report of the Chief of Engineers.

SEC. 5. That the Secretary of War be, and he is hereby, authorized to make such rules and regulations for the navigation of the South Pass of the Mississippi River as to him shall seem necessary or expedient for the purpose of preventing any obstruction to the channel through said South Pass and any injury to the works therein constructed. The term "South Pass," as herein employed, shall be construed as embracing the entire extent of channel between the upper ends of the works at the head of the pass and the outer or sea end of the jetties at the entrance from the Gulf of Mexico; and any person who shall willfully violate any rule or regulation made by the Secretary of War in pursuance of this act shall be guilty of a misdemeanor, and, on conviction thereof, shall pay a fine not exceeding five hundred dollars and undergo an imprisonment not exceeding six months, at the discretion of the court [^a].

SEC. 6. That for the purpose of securing the uninterrupted gauging of the waters of the Lower Mississippi River and its tributaries, as provided for in joint resolution of the twenty-first of February, eighteen hundred and seventy-one, upon the application of the Chief of Engineers, the Secretary of War is hereby authorized to draw his warrant or requisition from time to time upon the Secretary of the Treasury for such sums as may be necessary to do such work, not to exceed in the aggregate for each year the amount [^b] appropriated in this act for such purpose: *Provided, however*, That an itemized statement of said expenses shall accompany the annual report of the Chief of Engineers.

SEC. 7. That for the purpose of securing the uninterrupted work of operating snag boats on the Upper Mississippi River, and of removing snags, wrecks, and other obstructions in the Mississippi River, the Secretary of War, upon the application of the Chief of Engineers, is hereby authorized to draw his warrant or requisition from time to time upon the Secretary of the Treasury for such sums as may be necessary to do such work, not to exceed in the aggregate for each year the amounts

^a This section is amended by section 3 of the river and harbor act approved Sept. 19, 1890.

^b On Apr. 21, 1891, the Secretary of War decided, after inquiry at the Treasury Department, that the amount of the permanent annual appropriation thus provided did not exceed \$6,000. Section 9 of the river and harbor act approved June 13, 1902, increases this limit to \$9,600.

appropriated in this act for such purposes: *Provided, however,* That an itemized statement of said expenses shall accompany the annual report of the Chief of Engineers.

Proviso.
Report.

SEC. 8. That the Secretary of War shall cause the manuscript of the annual report of the Chief of Engineers and subordinate engineers, relating to the improvement of rivers and harbors, and the report of the Mississippi and Missouri River Commissions to be placed in the hands of the Public Printer on or before the fifteenth day of October in each year, and the Public Printer shall cause said reports to be printed with an accurate and comprehensive index thereof, on or before the first Monday in December in each year, for the use of Congress.

Annual re-
ports of Chief
of Engineers
and Mississippi
and Missouri
River Commis-
sions.

SEC. 9. That whenever the Secretary of War shall have good reason to believe that any railroad or other bridge now constructed, or which may hereafter be constructed, over any of the navigable water-ways of the United States is an obstruction to the free navigation of such waters, by reason of insufficient height, width of span, or otherwise, or where there is difficulty in passing the draw-opening or the raft-span of such bridge by rafts, steam-boats, or other water-craft, it shall be the duty of the said Secretary to give notice to the persons or corporations owning or controlling such bridge to so alter the same as to render navigation through or under it free, easy, and unobstructed; and in giving such notice he shall prescribe in each case a reasonable time in which such alteration is to be made. If, at the end of such time, the alteration has not been made, the Secretary of War shall forthwith appraise the Attorney-General of the United States, whose duty it shall be to institute suit, in the name of the United States, without delay, in the circuit or district court of the United States for the circuit in which such bridge is located, which court is hereby invested with jurisdiction for this purpose, to recover from the owners or managers of such bridge the fines mentioned in the succeeding section of this act [a].

Obstructions
to navigation
by bridges.
Secretary of
War to provide
against.
Vol. 23, p.
148.
Ante, p. 417.
Vol. 26, p.
453.
Post, p. 580.
Vol. 30, p.
1153.
Post, p. 890.

Litigation.

SEC. 10. That the owner or owners or manager or managers of any railroad or other bridge obstructing the free navigation of any navigable water-way of the United States who shall willfully fail or refuse to remove the same, or to cause the necessary alterations to be made in the same so as to render navigation through or under it free, easy, and unobstructed to rafts, steam-boats, or other water-craft, after receiving notice to that effect from the Secretary of War and within the time prescribed by him, shall be subject to a fine as penalty therefor of five hundred dollars per month for the time he or they

Punishment
for obstructing
navigation.
Vol. 23, p.
148.
Ante, p. 417.
Vol. 26, p.
453.
Post, p. 580.
Vol. 30, pp.
1153, 1154.
Post, p. 890.

^a This section is amended by the river and harbor acts approved Sept. 19, 1890 (sec. 4), and Mar. 3, 1899 (sec. 18).

are in default, and the amount so recovered shall be placed to the credit of the improvement fund of the water-way obstructed by such bridge [^a].

Fishways.

SEC. 11. Whenever the improvements provided for by this act, or those which have heretofore been prosecuted by the United States, or may hereafter be undertaken, shall be found to operate (whether by lock and dam or otherwise), as obstructions to the passage of fish, the Secretary of War may, in his discretion, direct and cause to be constructed practical and sufficient fish-ways, to be paid for out of the general appropriations for the streams on which such fish-ways may be constructed.

Harbor lines.
Vol. 24, p. 329. *Ante*, p. 462. Vol. 26, p. 455. *Post*, p. 584. Vol. 28, p. 364. *Post*, p. 713. Vol. 30, p. 1151. *Post*, p. 887.

SEC. 12. Where it is made manifest to the Secretary of War that the establishment of harbor lines is essential to the preservation and protection of harbors, he may, and is hereby, authorized to cause such lines to be established, beyond which no piers or wharves shall be extended or deposits made except under such regulations as may be prescribed from time to time by him [^b].

Surveys.

SEC. 13. That the Secretary of War is hereby directed, at his discretion, to cause examinations or surveys, or both, to be made, and the cost of improvement to be estimated at the following localities, to wit: In the States of—

Arkansas.

ARKANSAS.

Ouachita River, Louisiana and Arkansas, from its mouth to head of navigation, to determine the advisability and probable cost of its permanent improvement.

Alabama.

ALABAMA.

The Secretary of War is hereby authorized and directed to cause a survey to be made at the earliest practicable time for the location of a channel in and along the Coosa River, in Alabama, from the rapids at Wetumka to connect with the improvements already completed on said river above the Ten Islands, and to direct the engineer making the survey to report as to the most feasible, economical, and suitable plan for making such improvement.

Warrior River from Tuscaloosa to Demopolis, for deepening and widening the channel with a view of the easy transportation of coal.

Sipsey River, from the Tombigbee River at Vienna to Texas, with a view of easy transportation of coal.

Choctawhatchee, for low water navigation.

^a This section is amended by the river and harbor acts approved Sept. 19, 1890 (sec. 5), and Mar. 3, 1899 (sec. 18).

^b This section is amended by the river and harbor acts of Sept. 19, 1890 (sec. 12), Aug. 18, 1894 (sec. 9), and Mar. 3, 1899 (sec. 11).

CALIFORNIA.

California.

San Beunaventure Harbor.

Eel River, entrance and inside bars to head of navigation.

Klamath River, entrance and inside bars to head of navigation.

San Simeon Bay.

The Secretary of War is hereby directed to make an examination and report to Congress as to the necessity for the establishment and maintenance of public moorings for the protection of shipping in the open and exposed ports on the Northern coast of California at Fort Ross, Fish's Mill, Fish Rock, Shelter Cove, Trinidad and such other places as may be deemed advisable by him.

CONNECTICUT.

Connecticut.

Mystic River.

New London Harbor.

Black Rock Harbor, for breakwater to Pentfield Reef and south from Fairweather Island.

ARIZONA.

Arizona.

Colorado River, between Camp Mojave and El Dorado Canon.

Colorado River, between Camp Mojave and the point where the boundary-line between Nevada and Utah Territory intersects said river.

DELAWARE.

Delaware.

Nanticoke River, from Seaford to Concord.

Mahon River.

Prime Hook Creek.

Appoquinimink Creek.

DAKOTA.

Dakota.

Ice harbor at or near Bismarck, on the Upper Missouri River.

FLORIDA.

Florida.

Saint Andrew's Bay.

Chipola River, from its mouth to Marianna.

Saint Mark's River and bar at its mouth.

Ocklawaha River from its mouth to Lake Griffin.

Homosassa River and bar at its mouth.

Chipola River from its mouth to Wewahitchka and the "Cut Off" and "Lee's Slough," running from the Apalachicola River to the Chipola River.

Crystal River and bar at its mouth.

Alafia River and bar at its mouth.

Sarasota Bay.

The channel between Tampa Bay and Old Tampa Bay.

Georgia.

GEORGIA.

Flint River, rock reefs at Albany and above.
Savannah River above Augusta and between Augusta and Andersonville.

Oconee River.

Ocmulgee River. Resurvey.

Indiana.

INDIANA.

Grand Calumet River [^a], beginning one-half mile east of Hammond, and thence eastward to Lake Michigan.

For the survey of a canal-way connecting the waters of Lake Michigan with the Calumet River, beginning at a point on the Calumet River one mile east of Hammond, Indiana, and running due north to Berry Lake, and thence along the eastern waters of said Berry Lake; thence northeast to Lake Michigan. The survey to estimate a canal fourteen feet deep and two hundred feet wide.

Berry Lake forming a natural harbor of refuge.

Illinois.

ILLINOIS.

Moline City Harbor.

Grand Calumet River.

Mississippi River, the main slough at Hamilton, Illinois, to the end of securing a good and sufficient steamboat landing at that point.

Iowa.

IOWA.

For a survey [*sic*] and examination of the Mississippi River at and near the head of Beaver Island, at Clinton, Iowa, to determine what is necessary to remove the sandbars there formed and forming, so as to make navigable and protect the entrance to the western channel, and the channel itself that runs between Beaver Island and the Iowa shore.

Kentucky.

KENTUCKY.

Harbor at Owensboro [^b].

Big Sandy River from Catlettsburgh to Pikeville, on Louisa [Levisa] Fork, and to the mouth of Pond Creek on Tug Fork.

Louisiana.

LOUISIANA.

Bayou Teche, from mouth to Saint Martinsville.

Atchafalaya River, from Berwick's Bay to Gulf of Mexico, to secure a channel of twenty feet depth.

Mouth and Passes of Calcasieu River.

^a Usually called Calumet River.

^b In Ohio River.

Bayou Terrebonne, for continuing dredging three miles above Houma.

Harbor of Baton Rouge.

Tangipahoa River.

Bayou Dorcheat, from Lake Bisteneau to the Arkansas line.

Tchefuncta and Bogue Falia.

Bayou Chitta [^a].

Bayou des Glaises, with a view to establishing locks.

Bayou Saint John, from head of navigation to Lake Pontchartrain.

Bayou Lafourche, from Donaldsonville to Gulf.

Amite River.

Bayou Manchac.

Bayou Teche, with a view to putting in locks.

Tickfaw River.

Bayou Terrebonne and Bayou Black [^b], with the view of opening a shorter water-way between Mississippi River and Berwick's Bay, Texas and Mexico.

MARYLAND.

Maryland.

Eastern Branch of Potomac River.

Wicomico River [^c].

North East River.

Manokin River.

Warwick River.

Wetypkin River.

Chester River, between Crumpton and Jones' Landing.

South East River.

La Trappe River.

Still Pond Harbor.

Tuckahoe River.

Sassafras River.

Elk River.

MASSACHUSETTS.

Massachusetts.

Taunton River.

Cohasset Harbor.

Weymouth River.

Goose Point Channel, Plymouth Harbor, to public wharf at Kingston.

Weir River.

Salem Harbor, including South River.

Beverly Harbor.

Cranes and Waters Rivers of Essex Branch.

Martha's Vineyard, inner and outer harbor at Edgarton.

^a Usually known as Bogue Chitto.

^b Discharges into Bayou Boeuf, which latter empties into Berwick Bay (an enlargement of Atchafalaya River) at Morgan City.

^c The reports upon this item relate to the stream of that name on the eastern shore of the State.

Stage Harbor at Chatham.

Westport Harbor, and East and West Branch of Westport River.

Malden River, as to straightening, widening, and deepening the channel.

Mississippi.

MISSISSIPPI.

Gulf Port Harbor, with a view to obtaining a twenty foot channel two hundred feet wide to approach the shore as near as practicable.

Leaf River, from its mouth to mouth of Bowie Creek, near the New Orleans and Northeastern Railroad.

Chickasahay River, from its mouth to Enterprise.

Bluff Creek, from its mouth to the head of navigation.

Tombigbee, between Vienna and Cotton Gin, with a view of obtaining continuous navigation.

Bogue Phalia, especially the part known as the Narrows, with view to its improvement.

Minnesota.

MINNESOTA.

Duluth.

Michigan.

MICHIGAN.

False Presque Isle Harbor, Lake Huron, for a harbor of refuge.

Au Gres River, to deepen channel to village of Au Gres to ten feet in depth.

Black River, Lake Superior, to deepen channel to depth of sixteen feet and constructing a breakwater.

Detroit River, at Gross Point, to dredge channel now in use to depth of twenty feet.

Petoskey Harbor, for breakwater and harbor of refuge.

Thunder Bay River, Alpena, for sixteen foot channel from mouth to one mile above.

Au Sable River at Au Sable, with view of twelve foot channel and breakwater.

Port Austin, for breakwater.

Lexington, for breakwater.

Forestville, for breakwater.

Black River, at Port Huron, to deepen channel from mouth to Grand Trunk railroad bridge to depth of eighteen feet.

Pine River, at Saint Clair City, to deepen channel from mouth to Belknap's brick-yard to depth of sixteen feet.

Quanicasssee River, to deepen channel from mouth to village of Sebewaing to twelve feet.

Port Sanilac, for harbor of refuge.

Saugatuck Harbor, to obtain channel of navigable width, with a minimum depth of fifteen feet and reconstructing piers.

Monroe Harbor, to deepen channel to sixteen feet.

Grand River, from Grand Rapids to Lake Michigan: For channel of navigable width, minimum depth of ten feet.

Algonac on St. Clair River, with view of uniting north and south channels between Clark and Harsems Islands.

MAINE.

Maine.

Monhegan Island Harbor.

Belfast Harbor.

Harbor and channel at Pembroke.

Union River and Union River Bay.

Harrissecket River.

Saint Croix River: Resurvey.

Medomac River.

Pleasant River, from Columbia Falls to its mouth.

Kennebunk River.

MISSOURI.

Missouri.

Clarksville Harbor^a].

Saint Louis Harbor.

Grand River.

The Secretary of War is hereby authorized and directed to cause a survey to be made of the Osage River, Missouri, from its mouth up to the first shoal, and five miles above the same, and to report an estimate, based on such survey, of the cost of constructing one lock and dam within the limits of said survey, and the effect upon the navigation of said river, of constructing said lock and dam.

Missouri River at Miami.

NEW HAMPSHIRE.

New Hampshire.

Cocheco River, from Dover to its mouth.

The Secretary of War is hereby authorized and directed to cause a survey to be made of the Hampton River in New Hampshire, and to direct the engineer making the survey to report as to the most feasible, economical, and suitable plan for improving the same.

NEW MEXICO.

New Mexico.

Rio Grande River, from Embudo to El Paso, Texas.

NEW YORK.

New York.

Water-way around Niagara Falls, of capacity and facilities sufficient to float merchant ships and ships of war of modern build, drawing twenty feet of water, said water-way to commence in a navigable part of Niagara River, in Niagara County, at or near Tonawanda, and to end in the navigable waters of said river below said

^a In Mississippi River.

falls, or in navigable waters connected therewith. For the purposes hereof the Secretary of War, in his discretion, may take into consideration and revise the surveys and estimates of such a waterway heretofore made by Brevet Colonel C. E. Blunt, of the United States Corps of Engineers, in compliance with a joint resolution of the Congress approved March twenty-second, eighteen hundred and sixty-seven.

Vol. 15, p.
21.

Plattsburgh: For extension of three hundred feet on north end of the breakwater.

Fort Pond Harbor, Montauk.

East Rockaway Creek, Long Island.

Brown's Creek, Saysville.

Port Jefferson Inlet.

Wappinger's Creek, from Wappinger's Falls to its mouth.

Tarrytown Harbor.

East Rockaway Creek [^a].

Salmon River [^b], from railroad bridge at Fort Covington to the international line, with a view of deepening the channel to seven feet.

Black River, from Brownville to Lake Ontario.

Cape Vincent Harbor, to establish a breakwater.

Shoals between the Sister Islands and the cross-over light in Saint Lawrence.

Larchmont Harbor.

A ship channel between Jersey City and Ellis Island.

Harbor of refuge at Frontberg [^c], on the south shore of Lake Ontario.

Genesee River, from a point south of the present harbor and above the village of Charlotte, extending south-erly a distance about three thousand feet.

Channel connecting Irondequoit Bay with Lake Ontario, for harbor of refuge at Irondequoit Bay.

Harbor at Troutberg [^d].

Harbor, mouth of Salmon River [^e], Lake Ontario.

Lake George, with view of placing buoys and improv-ing channel.

The East River, with a view to the removal of a ledge of rocks in the same, from the foot of Broome street to the foot of Twenty-third street in New York City. This survey to be made notwithstanding any other survey heretofore made.

^a This item and the fifth one above it appearing to refer to the same stream, one report was submitted covering both items.

^b A tributary of St. Lawrence River.

^c The locality bearing this name could not be found. The harbor intended was probably that at Troutberg Bay, an examination of which is provided for in the third item following.

^d The report on this item had reference to the selection of Trout-berg Bay for a harbor of refuge.

^e Enters Mexico Bay, Lake Ontario, about 20 miles east of Oswego. Selkirk is at the mouth and Port Ontario about 1 mile above the mouth.

NEW JERSEY.

New Jersey.

Alloway Creek.

Little Salem Creek.

Hackensack River, from the lower bridge at the town of Hackensack to the Erie Railway Bridge.

From the pier Lithe [line] to the main channel, a distance of about sixteen hundred and fifty feet, and seven hundred feet north by northeast from Ellis Island for a ship channel or basin between the deep water of Hudson River and Ellis Island.

NORTH CAROLINA.

North Carolina.

Trent River, to upper Quaker Bridge.

Fishing Creek.

Shallotte River.

Swift Creek.

White Oak River.

North East River (Cape Fear).

Waterway, between New River and Swansboro.

Mackey's Creek.

Pasquotank River, above the mouth of Turner's Cut.

Cape Fear River, North Carolina, from Wilmington to the ocean, with an estimate of the cost of its improvement, with a navigable channel twenty feet deep at mean low water.

Ocracoke Inlet.

Tar River, from Tarboro to Rocky Mount.

OHIO.

Ohio.

Conneaut Harbor, for deepening and widening channel.

Cowles Creek or Geneva.

Mouth of Chagrin River, near Willoughby.

Muskingum River from Zanesville to Dresden.

OREGON.

Oregon.

Siuslaw River and bar.

Clackamas River.

Tualatin River.

The Secretary of War is authorized and directed to appoint a board of three engineers from the United States Army whose duty it shall be to thoroughly examine the obstructions to navigation in the Columbia River at The Dalles and Celilo Falls, and at Three and Ten Mile Rapids, and to report to the Secretary of War, on or before the first Monday in December next, as to the feasibility and advisability of overcoming such obstructions by means of a boat-railway at The Dalles and Celilo Falls, and by widening, to a navigable status for large tonnage river boats, the channel of said river at Three and Ten Mile Rapids, accompanied by careful and detailed plans, with estimates of the cost and a statement as to the usefulness of such improvements to navigation and of their

relations and value to commerce; and said board shall also report, at the same time, as to any other plan or project for overcoming said obstructions at said points, whereby said obstructions to navigation may be removed, which in the judgment of said board may be deemed either more desirable than the above or worthy of consideration by the Secretary of War and Congress, and shall report detailed plans, with estimates of the cost of such proposed improvement or improvements, and as to their relations to commerce and usefulness to navigation; and said board shall report which of said projects is by it deemed most advisable. And the Secretary of War shall transmit said report to Congress, at its next session, with his own views and those of the Chief of Engineers of the United States Army thereon; and the sum of fifteen thousand dollars, or so much thereof as may be necessary, is hereby appropriated to defray the cost of making said examination and survey and the expenses of said board.

Nehalem Bay and bar.

Young's River and its tributary Klaskuine River.

Umpqua River, in the State of Oregon; separate surveys and estimates to be made, first, of that portion of such river between Scottsburg and the mouth; and second, of that portion between Scottsburg and Hart's Rapids, near Elkton.

South Caro-
lina.

SOUTH CAROLINA.

Broad and Saluda River, above Columbia.

Beaufort River, from a point three miles south of the town of Beaufort through to Coosaw River, with view to its improvement, especially at Brickyard.

Ashepoo River, from the Charleston and Savannah Railroad bridge, six miles down the river, with view to removing obstructions and shoals caused by sunken vessels.

Connect North Edisto and South Edisto Rivers by Saint Pierre River and South Creek.

Savannah River, as to whether the damage to the Vernezobie Freshet Bank in eighteen hundred and eighty-seven was caused by the work at cross-tides, and whether the maintenance of said bank is essential to the success of the work at cross-tides, and what will be the cost of so constructing said bank as to confine the water of said river to its bed.

Owendaw and Wando Rivers and other waters and water-routes connecting Bull's Bay and the harbor of Charleston.

Socastee Creek from its entrance into Waccamaw River to the bridge at Socastee.

Combahee River: Examine whether the breaking of Bull River into Combahee River near the head of Bull River will injure the navigation of Combahee River, and report a plan for obstructing said breaks and the cost thereof.

TEXAS. .

Texas.

For removal of raft on Gaudaloupe River.

Mouth of Caney Creek, where it empties in Matagorda Bay.

Removal of bar at mouth of Cedar Bayou where it empties into Galveston Bay.

TENNESSEE.

Tennessee.

Lower Cumberland River, from Nashville to mouth, to ascertain if necessary to establish locks and dams.

RHODE ISLAND.

Rhode Island.

Fishing Place Cove^a, near Seaconnet Point, with view to constructing a breakwater.

Cove near southeast extremity of Coaster's Harbor Island, and water-way between said island and Rhode Island, with a view to deepening the water-way and removing obstructions.

Entrance to Point Judith Pond, west of Point Judith, with a view of establishing a harbor of refuge.

Coast near life-saving station, East Point Judith, with a view to constructing a breakwater.

Greenwich Bay, to deepen water on the bar at Long Point.

For a survey of Narragansett Bay at the mouth of Narrow River with a view of constructing a breakwater.

VERMONT.

Vermont.

Swanton Harbor, as to what changes are necessary in present improvements.

VIRGINIA.

Virginia.

Quantico Creek.

Occoquan Creek.

Acquia Creek.

Chickahominy Creek.

Onancock Harbor.

Hampton Creek and Bar.

For cutting of Hospital Point [Norfolk Harbor] and giving a depth of twenty-five feet and an additional width of two hundred feet.

Chuckatuck Creek.

Bennett's Creek.

Ware River.

Hull Creek.

Occobannock [Occohannock].

Roanoke River, between Clarksville and Eaton Falls.

^a Usually called Churchs Cove; it is known also as Sakonnet Point Harbor.

Hunting Creek [Fairfax County], at its mouth.
 Harbor of Cape Charles City and approaches by Cheuton [^a] Inlet.
 Chincoteague Inlet, for purposes of a breakwater.
 Machodac River.
 Nassowaddox River.
 The channel crossing the Potomac from Alexandria, Virginia, to the Maryland side.

New York.

NEW YORK.

Great Chazy River from its mouth on Lake Champlain to Champlain Village.

West Virginia.

WEST VIRGINIA.

Cheat River.
 Monongahela River above upper dam [^b].
 Great Cacapon.
 South Branch of the Potomac River.

Washington Territory.

WASHINGTON TERRITORY.

Upper Columbia River, between Wallula and British line.
 North Palouse River.

Wisconsin.

WISCONSIN.

Centreville Creek, Manitowoc County.
 Racine Harbor, enlarging and deepening channel.
 Kenosha Harbor, for refuge.
 Harbor at mouth of Fond du Lac River, in Lake Winnebago.

Oconto Harbor, channel sixteen feet deep and seventy-five feet wide from piers to first contour in river at Spies Slough.

For a survey of Minnesota Point, at Superior, at the west end of Lake Superior, to ascertain what, if anything, should be done to preserve the same from the inroads of the Lake, and for the protection of the harbor, together with the cost thereof.

Menomonee Harbor, from the waters of Green Bay to N. Ludington and Company's mill, Wisconsin, for a channel sixteen feet deep and two hundred feet wide.

Appropriation for surveys, etc.

SEC. 14. For examinations, surveys, and contingencies, and for incidental repairs, for which there is no special appropriation, for rivers and harbors, one hundred and fifty thousand dollars: *Provided*, That no survey shall be made of any harbors or rivers until the Chief of En-

Provisos.

^a Probably meaning Cherrystone Inlet.

^b That is, Dam No. 9, which ponds the river to Morgantown. The locality examined was therefore above Morgantown.

gineers shall have directed a preliminary examination of the same by the local engineer in charge of the district, or an engineer detailed for the purpose; and such local or detailed engineer shall report to said Chief of Engineers, whether, in his opinion, said harbor or river is worthy of improvement, and shall state in such report fully and particularly the facts and reasons on which he bases such opinion, including the present and prospective demands of commerce; and it shall be the duty of the Chief of Engineers to direct the making of such survey, if, in his opinion, the harbor or river proposed to be surveyed be worthy of improvement by the General Government; and he shall report to the Secretary of War the facts, and what public necessity or convenience may be subserved thereby, together with the full reports of the local engineer: *And provided further*, That the Government shall not be deemed to have entered upon any project for the construction or improvement of any waterway, harbor or canal mentioned in this act unless or until the work of construction shall have been actually appropriated for. Said reports of preliminary examinations and surveys shall be made to the House of Representatives, and are hereby ordered to be printed when so made.

Preliminary examination to be made before survey.

Canal, etc., projects.

Report of preliminary examinations to be printed.

Received by the President July 31, 1888.

[NOTE BY THE DEPARTMENT OF STATE.—The foregoing act having been presented to the President of the United States for his approval, and not having been returned by him to the House of Congress in which it originated within the time prescribed by the Constitution of the United States, has become a law without his approval.]

CHAP. 870.—An Act To authorize the Kentucky Rock Gas Company to lay conduit pipes across the Ohio and Salt rivers. Aug. 13, 1888.
Vol. 25, p. 438.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of Congress is hereby given to the Kentucky Rock Gas Company to lay pipes for conducting natural gas, petroleum, or salt water across the Ohio River and Salt River, at such points as may be deemed necessary, between the lower boundary of Bradenburgh, in Meade County, Kentucky, and the upper boundary of Louisville, in Jefferson County, Kentucky: *Provided*, That said pipes be laid upon or beneath the bed of the river and in such manner as not to interfere with navigation, and under the supervision of the Secretary of War.

Kentucky Rock Gas Co. may lay pipes across Ohio and Salt rivers.

Proviso.
Not to obstruct navigation.

Approved, August 13, 1888.

Aug. 21, 1888. **CHAP. 900.**—An Act For improving the mouth of the Brazos River, Texas.
Vol. 25, p. 444.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Brazos River Channel and Dock Company, a corporation organized under and by virtue of the laws of the State of Texas, be, and are hereby authorized, on the conditions hereinafter mentioned, to construct, own, and operate such permanent and sufficient jetties and such auxiliary works as are necessary to create and permanently maintain, as hereinafter set forth, a navigable channel at the mouth of the Brazos River, Texas, between said river and the Gulf of Mexico, and so far into the main-land and between the banks of the said Brazos River as may be necessary to reach a place that will afford security from storms, swells, cyclones, and tidal waves, for the purposes of furnishing the vessels and boats adapted to the purpose facilities for navigation in and along the entire length of said channel, charging and collecting such toll therefor as may be prescribed by the regulations that may be made by the Secretary of the Treasury of the United States in conformity with the laws of the United States; and for that purpose they may construct, in the river, and likewise in the Gulf of Mexico, such walls, jetties, dikes, levees, and other structures, and employ such boats, rafts, and appliances as they may, in the prosecution of said work, deem necessary: *Provided*, That no such structures or means employed shall hinder, delay, or materially interfere with the free navigation in said river or between said river and the Gulf of Mexico; and, to protect their said works, they may build and maintain such levees or embankments as may be necessary to secure their permanency along the banks of said Brazos River; and said Brazos River Channel and Dock Company shall hold the United States harmless from any damages that may accrue to any person or persons by overflow or otherwise caused by the construction of said walls, jetties, dikes, levees, and other works constructed by said company: *Provided further*, That unless the construction of the proposed work shall be substantially commenced within one year from date of the approval of this act, and prosecuted with due diligence, the provisions contained herein in relation to the said improvement shall be null and void; and unless the said Brazos River Channel and Dock Company shall secure a navigable depth of twelve feet of water from a point in the river so far as may be necessary to reach a place that will afford security from storms, swells, cyclones, and tidal waves, above its mouth and extending from said point to a depth of twelve feet in the Gulf of Mexico, outside of the present bar, within three years after the date of the approval of this act, Congress may revoke the privileges herein granted in relation to

Brazos River
Channel and
Dock Co.

May create
channel at
mouth of Bra-
zos River, Tex.

Tolls.

Jetties, etc.

Provisos.
Free naviga-
tion to be
maintained.

Damages.

Commence-
ment.

12 feet to be
secured in
three years.

said improvement. And Congress may revoke the provisions herein granted in relation to said improvement, unless the said Brazos River Channel and Dock Company shall, after securing twelve feet of water, secure an additional depth of not less than two feet during each succeeding year thereafter; until eighteen feet shall have been secured; and in case said Brazos River Channel and Dock Company shall fail to comply with the foregoing conditions as to depth of water, and time, for any period of twelve months in excess of the time fixed, as aforesaid, then the privileges herein granted, in relation to said improvements shall absolutely become null and void without action by Congress.

Further
depth.

SEC. 2. That the works of improvement in the said Brazos River, from the mouth of said river to the point described in section one of this act, shall consist of the construction of dikes, wing-dams, levees, embankments, and dredging or other means which may be considered by said Brazos River Channel and Dock Company necessary for obtaining a depth of eighteen feet of water between the mouth of said river and said point described in section one of this act; and that the said Brazos River Channel and Dock Company may, if they shall decide it best for the interests of navigation, change the course of said river at the sharp bend in said river between the mouth of said river and the said point described in section one of this act, but in making such change the channel shall be made of sufficient depth and width to receive the volume of said river without disturbance of its regimen.

Construction.

SEC. 3. That if at any time during the construction of said jetties and auxiliary works, or after said jetties and auxiliary works shall have been completed, and said channel of eighteen feet in depth has been obtained, the United States shall have the right to pay the said Brazos River Channel and Dock Company the value of their jetties and other works constructed under and by the authority granted to said company by the State of Texas as well as by the authority of this act, and on such payment being made by the United States all right to said franchises and works on the part of said Brazos River Channel and Dock Company shall cease.

Right of Government to purchase.

SEC. 4. That Congress may at any time alter, amend or repeal this act.

Amendment.

Received by the President August 9, 1888.

[NOTE BY THE DEPARTMENT OF STATE.—The foregoing act having been presented to the President of the United States for his approval, and not having been returned by him to the house of Congress in which it originated within the time prescribed by the Constitution of the United States, has become a law without his approval.]

Sept. 10, 1888.

Vol. 25, p. 473.

CHAP. 999.—An Act Declaring that certain water reserve lands in the State of Wisconsin are and have been subject to the provisions of the Act of Congress entitled "An Act granting to railroads the right of way through the public lands of the United States," approved March third, eighteen hundred and seventy-five.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all lands in the State of Wisconsin described

Right of way
through water-
reserve lands in
Wisconsin.

Vol. 25, p.
654.

Post, p. 536.

in and withdrawn from sale by the proclamations of the President of the United States issued March twenty-second, eighteen hundred and eighty, April fifth, eighteen hundred and eighty-one, and November twenty-eighth, eighteen hundred and eighty-one ^a, for the reason that said lands would be required for or subject to flowage in the construction of dams, reservoirs, and other works proposed to be erected for the improvement of the navigation of the Mississippi River and certain of its tributaries, be, and the same are hereby, declared to be, and to have been at all times heretofore, subject to the provisions of a certain act of Congress, entitled "An act granting to railroads the right of way through the public

Vol. 18, p.
482.

Ante, p. 251.

lands of the United States," approved March third, eighteen hundred and seventy-five, as fully, effectually, and to the same extent as though said lands had not been described in said proclamations, or withdrawn from sale thereby, but had remained with the body of public lands

Proviso.

Right of
flowage.

subject to private entry and sale: *Provided, however,* That any and all parts of said lands acquired by any railroad company under said act of Congress shall at all times be subject to the right of flowage which at any time may become necessary in the construction or maintenance of dams, reservoirs, or other works which may be constructed or erected by or under the authority of the United States for the improvement of the navigation of the Mississippi River or its tributaries: *Provided further,* That the railroad companies availing themselves of this act shall, in addition to filing the maps now required by law to be filed, also file maps of definite location of their proposed lines of railroad, over said water reserve lands, in the office of the Secretary of War, and until the approval of said maps by the Secretary of War no right to occupy said lands shall vest in such companies; and no location shall be permitted which takes for right of way or stations lands needed for the use of the present reservoir system, or in the construction of dams or other works, or any proposed or probable extension of the same, or which will obstruct or increase the cost of the present or prospective reservoir system; or shall any railroad company be permitted to take material for construction from any of said reservoir lands outside the right of way granted herein.

Filing maps
of location.

Not to interfere
with res-
ervoir project.

Approved, September 10, 1888.

^a By act approved Jan. 30, 1889, the date Nov. 28, 1881, is corrected to read Feb. 20, 1882.

CHAP. 1041.—An Act To amend an Act entitled “An Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes,” approved July fifth, eighteen hundred and eighty-four.

Sept. 26, 1888.

Vol. 25, p. 497.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section seven of the “Act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes,” approved July fifth, eighteen hundred and eighty-four be, and the same is hereby, amended, so that the same shall read as follows:

United States canals.
Vols. 23, p.
148; 26, p.
455; 28, p.
362; 30, p.
1153; 32, p.
375. *Ante*, p.
416; *post*, pp.
585, 711, 890,
1009.

“SEC. 7. That it shall be the duty of the Secretary of War to prescribe such rules and regulations in respect to the use and administration of the Des Moines Rapids Canal, the Saint Mary’s Falls Canal, the Louisville and Portland Canal, and the Saint Clair Flats Ship Canal as in his judgment the public necessity may require, which rules and regulations shall be posted in some conspicuous place for the information of the public; any person knowingly and willfully violating such rules and regulations shall be liable to a fine not exceeding five hundred dollars, or imprisonment not exceeding six months, to be enforced in any district court in the United States within whose territorial jurisdiction such offense may have been committed.”

Regulations for use of, extended to St. Clair Flats Ship Canal.

SEC. 2. That this act shall take effect immediately.

Effect.

Approved, September 26, 1888.

CHAP. 1057.—An Act For the investigation of the mining debris question in the State of California.

Oct. 1, 1888.

Vol. 25, p. 498.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War is hereby authorized and directed to detail three officers from the Engineer Corps of the United States Army as a commission for the purpose of making a thorough examination and investigation of the mining debris question in the State of California, for the purpose of ascertaining whether some plan can be devised whereby the present conflict between the mining and farming sections may be adjusted and the mining industry rehabilitated; and for a complete examination of the injured navigable river channels, their tributaries and lands adjacent thereto, with a view to the improvement and rectification of said rivers. And that the sum of ten thousand dollars, or so much thereof as may be necessary, is hereby appropriated, out of any money in the Treasury not otherwise appropriated, for the purpose of carrying into effect the provisions of this act, said sum to be expended at the discretion of the Sec-

Mining debris in California.
Secretary of War to appoint Commission to investigate.
Vol. 27, p. 393.
Post, p. 610.

Appropriation.

Report.

retary of War; the said commission to report as early as practicable to the Secretary of War the result of their investigation, and the Secretary of War shall make report thereof to Congress.

Approved, October 1, 1888.

Oct. 1, 1888.
Vol. 25, p. 631.

[No. 46.] Joint Resolution Declaring the meaning of a clause in the river and harbor Act of August eleventh, eighteen hundred and eighty-eight.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

Fairport Harbor, Ohio.

Designation of appropriation.

Vol. 25, p. 405.
Ante, p. 490.

That the phrase "present low water mark" in the river and harbor bill of August eleventh, eighteen hundred and eighty-eight, in the paragraph referring to Fairport Harbor, Ohio, is intended to mean the inner shore line represented on map in the report of Chief of Engineers of eighteen hundred and eighty-one.

Approved, October 1, 1888.

Oct. 2, 1888.
Vol. 25, p. 505.

CHAP. 1069.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and eighty-nine, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and eighty-nine, namely:

Sundry civil expenses appropriations.

* * * * *

Mississippi River Commission.

MISSISSIPPI RIVER COMMISSION: For salaries and traveling expenses of the Mississippi River Commission, and for salaries and traveling expenses of assistant engineers under them, and for office expenses and contingencies, thirty-five thousand dollars.

* * * * *

Approved, October 2, 1888.

Oct. 19, 1888.
Vol. 25, p. 565.

CHAP. 1210.—An Act Making appropriations to supply deficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-eight, and for prior years, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, to supply deficiencies in the

Deficiency appropriations.

appropriations for the fiscal year eighteen hundred and eighty-eight, and for prior years, and for other objects hereinafter stated, namely:

* * * * *

ENGINEERS DEPARTMENT.

Engineer
Department.

MISSISSIPPI RIVER COMMISSION: Salaries and traveling expenses of the Mississippi River Commission, and for salaries and traveling expenses of assistant engineers, and for office expenses and contingencies, being for the period from April thirtieth, eighteen hundred and eighty-six, to close of the fiscal year ending June thirtieth, eighteen hundred and eighty-eight, and to be at once available, twenty-five thousand dollars.

Mississippi
River Commis-
sion.
Salaries and
expenses.

GAUGING THE WATERS OF LOWER MISSISSIPPI AND ITS TRIBUTARIES: Annual expenses of gauging the water of the Mississippi and its tributaries; continuing observations of the rise and fall of the river and its chief tributaries as required by joint resolution of February twenty-first, eighteen hundred and seventy-one, rendered necessary for establishing additional gauges at Fulton, Garland, and Collin's Bluff (mouth of Sulphur River) Arkansas, three thousand six hundred dollars.

Mississippi
River.
Gauging wa-
ters.

Vol. 16, p.
598.
Ante, p. 189.

To reimburse and pay the Hartford and New York Transportation Company for labor and money expended in removing, in an emergency, obstructions and dredging the Connecticut River [^a] in eighteen hundred and eighty-six, under the same rules and inspections as the work on said river had been conducted by the United States engineer officers in charge, two thousand six hundred and six dollars and eighty cents.

Hartford and
New York
Transportation
Co.
Payment to.

* * * * *

FOX AND WISCONSIN RIVER IMPROVEMENT.

For payment of judgments and awards recovered against the United States for flowage damages caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, and reported to Congress by the Attorney-General in Senate Executive Document Number One Hundred and Eighty-one, Fiftieth Congress, first session, namely:

Damages,
Fox and Wis-
consin rivers
improvement.

U. D. Mihills, five hundred and forty dollars;

Northwestern Mutual Life Insurance Company, two thousand and forty-three dollars and forty-five cents;

First National Bank of Madison, two thousand and thirty-nine dollars six cents;

C. H. Benton, one thousand and nineteen dollars and fifty-three cents;

George E. Sutherland, six hundred and twenty-six dollars and eighty-nine cents;

^a Below Hartford, Conn.

Loa Kennan, four hundred and fifty-eight dollars and eighty-three cents; in all, six thousand seven hundred and twenty-seven dollars and seventy-six cents.

Payment to
Commissioners.

To pay the amounts due the several commissioners to ascertain flowage damages caused by the improvement of the Fox and Wisconsin Rivers, in the State of Wisconsin, as follows:

To Commissioner William F. S. Root, two hundred and seven dollars;

To Commissioner J. W. Watson, eighty dollars and fifty cents;

To Commissioner Benjamin L. Cornish, two thousand one hundred and eighty-five dollars;

To Commissioner Joseph C. Burdick, two thousand one hundred and eighty-five dollars;

To Commissioner J. Volney Swetting, one thousand eight hundred and sixty-three dollars;

To Commissioner Samuel Vincent, three hundred and twenty-two dollars;

To Commissioner George H. Buckstaff, one thousand seven hundred and forty-eight dollars; in all, eight thousand five hundred and ninety dollars and fifty cents.

* * * * *

Approved, October 19, 1888.

Jan. 30, 1889.
Vol. 25, p. 654.

CHAP. 99.—An Act To amend an Act entitled "An Act declaring that certain water reserve lands in the State of Wisconsin are and have been subject to the provisions of the Act of Congress entitled 'An Act granting to railroads the right of way through the public lands of the United States,' approved March third, eighteen hundred and seventy-five," approved September tenth, eighteen hundred and eighty-eight.

Water-re-
serve lands,
Wisconsin.

Vol. 18, p. 482.
Ante, p. 251.
Vol. 25, p. 473.
Ante, p. 532.

Date of proc-
lamation cor-
rected.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That an act entitled "An act declaring that certain water reserve lands in the State of Wisconsin are and have been subject to the provisions of the act of Congress entitled 'An act granting to railroads the right of way through the public lands of the United States,' approved March third, eighteen hundred and seventy-five," approved September tenth, eighteen hundred and eighty-eight, be amended by striking out the words "November twenty-eighth, eighteen hundred and eighty-one," where they occur in said act, and inserting in lieu thereof the words "February twentieth, eighteen hundred and eighty-two."

Approved, January 30, 1889.

Feb. 14, 1889.
Vol. 25, p. 670.

CHAP. 165.—An Act To authorize and empower the Mount Carmel Development Company to draw water from the Wabash River, or its tributaries, in the county of Wabash, and State of Illinois.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assem-

bled, That the Mount Carmel Development Company, a corporation created and existing under the laws of the State of Illinois, be, and the same is hereby, authorized and empowered to construct and operate, during its corporate existence, a hydraulic canal from any point on the Wabash River above the lock and dam now in process of construction at the Grand Rapids of said Wabash River, or from any tributary of said river within the county of Wabash and State of Illinois, to any point on said river within the corporate limits of the city of Mount Carmel, Illinois; and to draw from said Wabash River or tributary thereof such supply of water as may be required for the purposes of such corporation: *Provided*, That such withdrawal be not detrimental to the interests of navigation and be subject to the direction and control of the Secretary of War.

Mount Carmel Development Co. may construct a canal from Wabash River, Ill.

Proviso.
To be controlled by Secretary of War.

Approved, February 14, 1889.

[No. 6.] Joint Resolution Making an appropriation for payment to the legal representatives of James B. Eads.

Feb. 14, 1889.
Vol. 25, p. 1335.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, appropriated, out of any money in the Treasury not otherwise appropriated, the sum of five hundred thousand dollars, to enable the Secretary of War to pay to the legal representatives of James B. Eads half the sum of one million dollars retained by the United States under the act of March third, eighteen hundred and seventy-five, to be paid on the expiration of ten years' maintenance of the channel the maximum depth and width as required by said act of March third, eighteen hundred and seventy-five and subsequent acts.

James B. Eads.

Payment to legal representatives.

Vol. 18, p. 465.
Ante, p. 248.

Approved, February 14, 1889.

CHAP. 362.—An Act To authorize the Union Gas Company to lay conduit pipes across the Ohio River.

Mar. 2, 1889.
Vol. 25, p. 791.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the assent of congress is hereby given to the Union Gas Company to lay pipes for conducting natural gas, petroleum, or salt water across the Ohio River at such points as may be deemed necessary, between the mouth of Buck Creek, in Harrison County, Indiana, and the city of Jeffersonville, Indiana, and points opposite thereto in the State of Kentucky, from any point in said

Union Gas Co. May lay pipes across Ohio River, Jeffersonville, Ind., to Louisville, Ky.

Proviso.

Not to ob-
struct naviga-
tion.

State to the upper boundary of the city of Louisville, Kentucky: *Provided*, That said pipes be laid upon or beneath the bed of the river and in such manner as not to interfere with navigation, and under the supervision of the Secretary of War.

Approved, March 2, 1889.

Mar. 2, 1889. **CHAP. 365.**—An Act To authorize the city of Lake View, Illi-
Vol. 25, p. 792. nois, to erect a crib in Lake Michigan for waterworks purposes

Lakeview,
Chicago, Ill.
May erect
pier in Lake
Michigan for
waterworks.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby given to the city of Lake View, county of Cook and State of Illinois, to extend a tunnel, or inlet pipes, into Lake Michigan so far as may be deemed necessary to insure a supply of pure water, and to erect a pier or piers and crib in the navigable waters of said lake, for the making, preserving, and working of said aqueducts or pipes or tunnel, the plan and location thereof to be subject to the approval of the Secretary of War; *Provided*, That said city shall furnish and maintain at its own expense such beacon lights or other signals on such piers or crib as the Light House Board shall prescribe.

Proviso.
Lights, etc.

Approved, March 2, 1889.

Mar. 2, 1889. **CHAP. 410.**—An Act Making appropriations to supply de-
Vol. 25, p. 905. ficiencies in the appropriations for the fiscal year ending June thirtieth, eighteen hundred and eighty-nine, and for prior years and for other purposes.

Deficiencies
appropriations.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated, out of any money in the Treasury not otherwise appropriated, to supply deficiencies in the appropriations for the fiscal year eighteen hundred and eighty-nine; and for prior years, and for other objects herein-after stated, namely:

* * * * *

Missouri
River.
Reimburse-
ment for pro-
tecting shores
at Winthrop,
Mo.

To reimburse and pay the sum of twelve thousand four hundred and twelve dollars to each of the following named companies, to-wit: The Chicago and Atchison Bridge Company, the Kansas City, Saint Joseph and Council Bluffs Railroad Company, the Hannibal and Saint Joseph Railroad Company, the Chicago, Rock Island and Pacific Railroad Company, and the Atchison, Topeka and Santa Fe Railroad Company, for moneys

expended by said companies in the construction of works at Winthrop, Missouri, for the protection of the shores of the Missouri River and necessary to preserve navigation at said point; in all, sixty-two thousand and sixty dollars.

* * * *

Approved, March 2, 1889.

CHAP. 411.—An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety, and for other purposes. Mar. 2, 1889.
Vol. 25, p. 939.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums be, and the same are hereby, appropriated for the objects hereinafter expressed for the fiscal year ending June thirtieth, eighteen hundred and ninety, namely:

Sundry civil expenses appropriations.

* * * * *

HARBOR OF NEW YORK: For expenses in preventing obstructive and injurious deposits in the harbor and adjacent waters of New York City, including sixty thousand dollars for the purchase or construction of a vessel, ninety four thousand and seventy dollars.

New York Harbor. Preventing obstructions, etc.

* * * * *

SURVEYS FOR DEEP-WATER HARBOR, GULF OF MEXICO: The Secretary of War is hereby authorized and directed to appoint a board of three engineer officers of the United States Army, whose duty it shall be to make a careful and critical examination of the northwest coast of the Gulf of Mexico, west of ninety three degrees and thirty minutes west longitude, and report as to the most eligible point or points for a deep harbor, to be of ample depth, width, and capacity to accommodate the largest ocean-going vessels and the commercial and naval necessities of the country, which can be secured and maintained in the shortest time and at the least cost: *Provided*, That this action shall not be construed to imply a cessation of work on other points on the Gulf coast, the improvement of which is deemed necessary for commercial or naval purposes. And the board of engineers shall report the result of its investigations to the Secretary of War as soon as practicable^[a].

Gulf of Mexico. Survey for a deep-water harbor.

Proviso. Other work not to cease.

To pay the expenses of said board, two thousand dollars, or so much thereof as may be necessary.

Expenses.

* * * *

Approved, March 2, 1889.

^a The Board deemed Galveston Harbor the most eligible point for the deep-water harbor.

Dec. 21, 1889. [No. 4.] Joint Resolution For removing damages caused by
Vol. 26, p. 668. floods in Sacramento and Feather rivers.

*Resolved by the Senate and House of Representatives
of the United States of America in Congress assembled,*
That the balances unexpended of the appropriations for
improving Sacramento and Feather rivers, California,
acts of August second, eighteen hundred and eighty-two,
July fifth, eighteen hundred and eighty-four, August
fifth, eighteen hundred and eighty-six; and August elev-
enth, eighteen hundred and eighty-eight, not exceeding
one hundred and ten thousand four hundred and forty-
nine dollars and sixty-seven cents, in all, are hereby made
immediately available for expenditure in improving navi-
gation by repairing the damages caused by floods in the
Sacramento and Feather rivers, subject only to the restric-
tions contained in Sec. 3., of the River and Harbor act
which became a law August eleventh, eighteen hundred
and eighty-eight.

Approved, December 21, 1889.

Sacramento
and Feather
rivers, Cal.

Balances
available for
repairing flood
damages.

Vols. 22, p.
205; 23, p.
143; 24, p.
326; 25, p.
422.

Ante, pp. 318,
409, 457, 514.

Restrictions.

Vol. 25, p.
423.

Ante, p. 515.

INDEX.

[A small ("superior") figure after the number of a page, e. g., 987², indicates the number of times the item appears on that page. Volume I contains pages 1 to 540 (part), and Volume II pages 540, (part) to the end.]

A.		Page.
Abandonment of improvements:		
Discontinuance of appropriations for unworthy works, recommendations regarding, to accompany annual reports-----		886
Discontinuance of certain projects-----	1008, 1009, 1123, 1124	
Temporary suspension of improvement of Wateree River, S. C.-----		1020
Abolishment of certain improvements. <i>See</i> Abandonment, etc.		
Absecon Bay, N. J.:		
<i>See also</i> Atlantic City Harbor.		
Sound between Barnegat Bay and Great Egg Bay. <i>See</i> Barnegat Bay, Harbor, and Inlet.		
Thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.		
Absecon Inlet, N. J. <i>See</i> Atlantic City Harbor.		
Academy Creek, Ga., improvement (under Brunswick Harbor)---	752, 959, 1092	
Accotink Bay and Creek, Va.:		
Examination and survey-----		196
Improvement-----		206
Acids, depositing of, into navigable waters. <i>See</i> Deposits, etc.		
Acquisition of land, easements, rights of way, etc. <i>See</i> Land.		
Acts of Congress for protection, etc., of navigable waters. <i>See</i> Navigable waters.		
Acushnet River, Mass. <i>See</i> New Bedford Harbor.		
Adams Island, St. Lawrence River, Canada. <i>See</i> St. Lawrence River.		
Adams's (M. J.) flume, test, etc., of-----	289, 381, 459, 637	
Adams (Tobias) Landing Harbor, Lake Champlain, Vt. <i>See</i> Tobias Landing Harbor.		
Additional or supplemental reports. <i>See</i> Reports.		
Advertisements:		
<i>See also</i> Contracts.		
For proposals may be dispensed with in cases of restoration under emergency appropriation-----	912, 1004, 1005	
For proposals to precede letting of contracts-----	155,	
	164, 243, 262, 277, 297, 324, 352, 382, 415, 463, 515	
Agate Bay Harbor, Minn.:		
Examination and survey-----		421
Improvement-----	443, 493, 555, 621, 688, 759, 860, 970, 1111, 1258	
Agents. <i>See</i> Employees.		
Agreements. <i>See</i> Contracts.		
Ahnapee (Algoma) Harbor, Wis. <i>See</i> Algoma Harbor.		
Ahnapee River, Wis. <i>See</i> Algoma Harbor.		
Aids to navigation, etc.:		
<i>See also</i> Lights.		
In the Philippines. <i>See</i> Philippine Islands.		
Under the Light-House Board-----		1182
Alabama Port, Ala. <i>See</i> Mobile Bay, etc.		
Alabama Power Company, dam of-----		1289
Alabama River, Ala.:		
Improvement-----		268,
	287, 314, 343, 372, 405, 450, 501, 567, 630, 696, 771, 870, 981, 1096,	
Montgomery to Coosa River, examination and survey-----		1271
Mouth to Coosa River, examinations and surveys-----	243, 586, 980, 1125	

	Page.
Alabama, State of:	
Black Warrior River, improvement, proceeds of sales of lands to be applied to	44, 73
Cahaba River, improvement, proceeds of sales of lands to be applied to	44, 73
Cahawba (Cahaba) Navigation Company, assent of Congress to State act incorporating the	46
Canal routes along coast. <i>See</i> Canals and Mexico, Gulf of.	
Chattahoochee River, opposite West Point, Ga., to Mississippi State line, toward Jackson, internal improvement, proceeds of sales of lands to be applied to	92
Coosa River, assent of Congress to State act for improvement of, including connection with Tennessee River	26
Coosa River, improvement, proceeds of sales of lands to be applied to	44, 73
Elk River, improving connection with Tennessee River, proceeds of sales of lands to be applied to	44, 73
Formation of State Government; proceeds of sales of lands to be applied to certain internal improvements	21, 92, 114
Mississippi State line, toward Jackson, to Chattahoochee River, opposite West Point, Ga., internal improvement, proceeds of sales of lands to be applied to	92
Mobile Bay to Tennessee River, internal improvement, proceeds of sales of lands to be applied to	92
Proceeds of sales of lands granted to, to be applied to certain internal improvements	21, 44, 73, 92
Tennessee River, assent of Congress to State acts for improvement of, including connection with Coosa River	26
Tennessee River, improvement, including connection with Elk River, proceeds of sales of lands to be applied to	44, 53, 54, 61, 64, 73
Tennessee River to Mobile Bay, internal improvement, proceeds of sales of lands to be applied to	92
Warrior River. <i>See</i> Black Warrior River, <i>supra</i> .	
Alafia River, Fla., examination and survey	519
Alameda, Cal. <i>See</i> Oakland Harbor.	
Alameda Creek, Cal., examination and survey	384
Alaqua Bayou, Fla., examination of mouth	643
Alaska:	
Mining for gold, etc., in Bering Sea	910, 911
Rights of way for railroads, and construction by them of piers and wharves	825
Albany, Oreg. <i>See</i> Willamette River.	
Albany flats, Soda Lake, La. <i>See</i> Cypress Bayou.	
Albany Power and Manufacturing Company, dam of	1214
Albemarle and Chesapeake Canal, N. C. <i>See</i> Norfolk Harbor waterways.	
Albemarle Sound, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Waterway from Dismal Swamp Canal to Winyah Bay, S. C., via. <i>See</i> Dismal Swamp Canal.	
Waterway from Norfolk, Va., to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Waterway from sounds of North Carolina to Norfolk, Va., via Pasquotank River and. <i>See</i> Norfolk Harbor.	
Waterway to Norfolk, Va., via Currituck Sound, improvement	564, 628, 694, 769, 867, 978, 1090, 1233
Waterway to the Atlantic, via Croatan and Roanoke sounds and across Bodie Island, improvement	121, 128
Waterway to the Atlantic (at Nags Head), via Croatan and Roanoke sounds and Roanoke Inlet, surveys	35, 97, 187
Alexandria, La. <i>See</i> Red River.	
Alexandria, Mo. <i>See</i> Mississippi River.	
Alexandria, Va. <i>See</i> Hunting Creek (Fairfax County) and Potomac River.	
Alexandria Bay Harbor, N. Y., examination and survey	795
Alexandria Canal, D. C. and Va., improvement	82
Alexandria Canal Company	82

Algoma (Ahnapee) Harbor, Wis.:	Page.
Examinations and surveys -----	186, 803, 1280
Improvement -----	191, 202, 236, 255, 271,
	292, 310, 337, 365, 400, 442, 492, 554, 620, 687, 757, 858, 969, 1257 ⁴
Algonac Harbor, Mich. See St. Clair River.	
Allegheny River, Pa. and N. Y.:	
See also Pittsburgh Harbor.	
Corydon, Pa., removal of dam, survey -----	801
Franklin, Pa., above, control, etc., of flood waters by The Lake Erie and Ohio River Ship Canal Co. -----	1209
Freeport, Pa., below, examination and survey -----	244
French Creek (Franklin), Pa., to mouth, examination and survey --	280
French Creek (Franklin), Pa., to Olean, N. Y., examination and survey -----	299
Olean, N. Y., to Warren, Pa., examination and survey -----	647
Open-channel improvement -----	286,
	312, 340, 368, 402, 446, 495, 560, 625, 691, 765, 864, 925, 976
Pittsburg, Pa., near, examination and survey -----	244
Slack-water improvement -----	446,
	495, 560, 625, 691, 765, 811, 830, 940, 976, 1024, 1087, 1202, 1230
Tarentum, Pa., lock and dam between Herr Island dam and (at Sixmile Island), examinations and surveys -----	647, 723
Tarentum, Pa., lock and dam near (at Springdale), examinations and surveys -----	647, 723
Tarentum, Pa., to Pennsylvania State line, locks and dams, survey --	802
Allerton Point, Boston Harbor, Mass. See Boston Harbor.	
Alligator Creek, or River, S. C.:	
Waterway from Santee River, and to and opposite McClellanville, to Bulls Bay and Charleston, via Wando and Owendaw rivers and. See Charleston Harbor.	
Waterways to Norfolk, Va., via. See Norfolk Harbor waterways.	
Alligator Head, Matagorda Bay, Tex. See Matagorda Bay.	
Alligator River, N. C., examinations and surveys -----	388, 467, 723
Alligator River, S. C. See Alligator Creek, or River.	
Allotments. See Appropriations.	
Allouez Bay, Wis. See Duluth-Superior Harbor.	
Alloway Creek, N. J.:	
Examination and survey -----	525
Improvement -----	560, 624, 690, 764, 863, 975, 1087, 1228
Alpena Harbor (Thunder Bay Harbor and River), Mich.:	
Examinations and surveys -----	186, 244, 522
Improvement -----	260, 365, 492, 554, 573, 635, 702, 757, 1253
Alsea Bay, Harbor, and River, Oreg.:	
Harbor and bar, examination and survey -----	300
River, examinations and surveys -----	647, 723, 796
River, improvement -----	789
River and bar, examination and survey -----	244
River and bay, examination and survey -----	281, 593
Altamaha River, Ga.:	
Examinations and surveys -----	326, 418
Improvement -----	349, 371,
	404, 449, 500, 565, 628, 694, 770, 867, 925, 979, 1092, 1236
Route to Brunswick. See Club and Plantation creeks.	
Alton, Ill. See Mississippi River.	
Alverson, Miles T., payment to -----	330
Alviso Creek, or Slough, Cal. See Alviso Harbor and Slough.	
Alviso Harbor and Slough, Cal.:	
Examinations and surveys -----	586, 643, 797
Improvement -----	860, 1001
Improvement discontinued -----	1123, 1124
Amelia River, Fla.:	
See also Fernandina Harbor.	
Examination and survey -----	418
American River, Cal., examination to prevent sand flowing into Sacra- mento River -----	714
American Transportation Company -----	676

	Page.
Amite River, La.:	
Examinations and surveys-----	299, 521
Improvement-----	320, 344.
	451, 502, 568, 631, 697, 773, 871, 983, 1097, 1242
Manchac Bayou, including, examination and survey-----	327
Anacortes Harbor, Wash., examination and survey-----	1132
Anacostia River (Eastern Branch of the Potomac), Md. and D. C.:	
Deposits of ballast or refuse matter in District of Columbia, prohibition regarding-----	743
Examinations and surveys-----	198, 243, 354, 521, 589, 822
Harbor lines in District of Columbia to be determined by Chief of Engineers and Commissioners of the District, and approved by the Secretary of War-----	903, 904
Improvement-----	562, 977, 1231
Ownership, etc., of swamp and marsh lands, reports regarding-----	822
Anahuac (Chambersia) channel, Tex. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Anchorage grounds, establishment of:	
Chicago Harbor, Ill., and adjacent waters of Lake Michigan-----	657
Hampton Roads, Va., and adjacent waters-----	1151
Kennebec River at Bath, Me.-----	1151
New York Bay and Harbor, Hudson and East rivers, Kill van Kull and Arthur Kill, and Newark and Raritan bays, N. Y. and N. J.-----	480, 1151
Potomac River at Washington, D. C.-----	1151
Quarantine anchorages-----	1151
St. Marys River, Mich-----	1151
Anchoring of vessels in navigable channels to detriment of navigation, prohibition against-----	889 ² , 890 ² , 893, 1010
Anclote Bay (River), Fla. <i>See</i> Anclote Harbor and River.	
Anclote Harbor and River, Fla.:	
Harbor, examination and survey-----	418
Improvement-----	869, 981, 1094, 1238
River, examinations and surveys-----	464, 715, 797
Andalusia, Ill. <i>See</i> Mississippi River.	
Anderson Guaranty and Trust Company:	
Dam across Savannah River at McDaniel shoals, Ga. and S. C.-----	1284
Dam across Savannah River at Middleton shoals, Ga. and S. C.-----	1285
Dam across Savannah River at Turner shoals, Ga. and S. C.-----	1285
Andersonville, S. C. <i>See</i> Savannah Harbor and River.	
Andre Bayou, La., examination and survey-----	326
Andrews, J. F., dams of-----	1216
Androscoggin River, Me.:	
<i>See also</i> Brunswick Harbor.	
Examination and survey below Brunswick-----	385
Andura (Nandua) Creek, Va. <i>See</i> Nandua Creek.	
Angelina River, Tex., examination and survey-----	209
Annapolis Harbor, Md.:	
Examinations and surveys-----	279, 326, 798
Improvement-----	312, 334
Ann, Cape, Sandy Bay, Mass. <i>See</i> Sandy Bay.	
Annisquam (Squam) Harbor, Mass., examination, survey, and improvement between Gloucester Harbor and-----	25
Annual appropriations. <i>See</i> Permanent annual, under Appropriations, and Mound City to Cairo, under Ohio River.	
Annual estimates. <i>See</i> Estimates, etc.	
Annual reports. <i>See</i> Estimates, etc., and Reports.	
Apalachicola Bay and River, Fla.:	
Canal to St. Marys River, surveys-----	30, 54, 124
Harbor in bay, examinations and surveys-----	69, 90, 187, 196, 280, 797, 1126
Harbor in bay, improvement-----	64, 79, 87
	89, 314, 335, 363, 398, 439, 489, 551, 617, 683, 753, 851, 961, 1093, 1237
River, Chattahoochee to Apalachicola, examination and survey---	209
River, dredge boat for (under Chattahoochee River)-----	867
River, including the Cut-off and Lee Slough, improvement-----	43,
	53, 57, 230, 240, 268, 287, 314, 343, 371, 405, 449,
	501, 566, 629, 695, 771, 868, 925, 980, 1094, 1238

Appomattox River, Va.:	Page.
Examinations and surveys-----	185, 496, 648, 919, 1232
Improvement-----	119, 193, 206, 216, 231, 241, 258, 267, 286, 313, 341, 379, 403, 446, 496, 562, 626, 692, 768, 865, 925, 977, 1039, 1090, 1232
Improvement, assent of Congress to State act for-----	29
Apponaug Harbor, R. I., examination and survey-----	648
Appoquinimink Creek, or River, Del.:	
Examination of Listons Point-Reedy Island dike, Delaware River, with reference to channel to-----	766
Examinations and surveys-----	328, 519
Improvement-----	562, 625, 691, 767, 865, 976, 1088, 1230
Improvement of channel to Delaware River channel, through Lis- tons Point-Reedy Island dike-----	766
Appropriations:	
See also Arrearages, Contracts, Estimates, etc., Expenditures, Labor, Land, Materials, Preservation and repairs, Property, Proposals, and Reports.	
Amounts and dates of, for each work to be stated in annual reports--	155, 164
Availability of (acts of 1866 and 1867), until completion of works--	155, 165
Availability of, until expended-----	225
Balances, unexpended (acts of 1866 and 1867), availability of, until completion of works-----	155, 165
Balances, unexpended, availability of, until expended-----	225
Balances, unexpended, belonging to certain discontinued improve- ments to be carried to surplus fund-----	1008, 1009, 1123, 1124
Balances, unexpended, carried to surplus fund; reappropriation--	225
Balances, unexpended (act of July 11, 1870), reappropriation of--	197
Bridges obstructing navigation, alterations. See Permanent indefi- nite, etc., <i>infra</i> .	
Canals, operating and care. See Permanent indefinite, etc., <i>infra</i> .	
Combination in single proposals or contracts of two or more sepa- rate works-----	580, 1006, 1122, 1270
Compilations of, heretofore made, by projects, by acts, and by States-----	791, 792, 1011
Consolidated works, balances, allotments, and expenditures regard- ing-----	1005, 1121, 1270
Continuing contracts, prosecution of work when available funds or authorizations are insufficient for completion-----	1056, 1122, 1271
Contracts, funds to be adequate before making of-----	23
Dams, fish ways or ladders. See Fish ways, etc., <i>infra</i> .	
Dams, maintenance and care. See Permanent indefinite, etc., <i>infra</i> .	
Discontinuance of, for unworthy works, recommendations regard- ing, to accompany annual reports-----	886
Dredge boats for Great Lakes or Atlantic coast north of Cape Henry, prohibition against use of funds for construction of, with- out Congressional authority; repeal-----	1057, 1281
Emergency, for restoring improvements-----	911, 912, 925, 1004, 1056, 1121, 1124, 1269
Expenditures to be by contract, after advertising-----	154, 155
Expenditures to be by contract or otherwise-----	164, 243, 262, 277, 297, 324, 352, 382, 415, 463, 515, 1005, 1121, 1270
Expenditures to be judicious and economical-----	382, 414, 462
Fiscal-year appropriations. See Permanent annual, <i>infra</i> , and Mound City to Cairo, under Ohio River.	
Fish ways or ladders, construction authorized, to be paid for from funds for streams concerned-----	518
Harbor lines, dredging inside of, use of money for, prohibited-----	643
Locks, operating and care. See Permanent indefinite, etc., <i>infra</i> .	
Maintenance, repair, or restoration, use for, as well as for further improvement-----	884, 1005, 1121, 1270
Moneys received from various sources, and not paid into Treasury, annual statement regarding-----	1205
Not to be construed as having been made, except when provided for in specific terms-----	1206
Permanent annual, Illinois River, Ill., operation of dredges and snag boats-----	516, 1259

Appropriations—Continued.	Page.
Permanent annual, Mississippi River, gauging, including principal tributaries	516, 1009
Permanent annual, Mississippi River, lower, operation of dredges and snag boats	516
Permanent annual, Mississippi River, South Pass, examinations and surveys	515, 516, 962
Permanent annual, Mississippi River, South Pass, improvement	921
Permanent annual, Mississippi River, upper, operation of dredges and snag boats	516, 1259
Permanent annual, Ohio River snag boats, operation of	584, 791
Permanent annual, Permanent International Commission of Congresses of Navigation	1027
Permanent indefinite, bridges obstructing navigation, alteration of	417
Permanent indefinite, canals, locks, dams, etc., operating and care	415
Permanent indefinite, Des Moines Rapids Canal and dry dock, Iowa, operating and care	346, 584, 585
Permanent indefinite, Galveston-Texas City channel, Tex., surveys	963, 964
Permanent indefinite, Gulfport-Ship Island Harbor channel, surveys	852
Permanent indefinite, Louisville and Portland Canal, Ky., operating and care	346, 347
Permanent indefinite, Mississippi River reservoirs, operating and care	415, 703
Permanent indefinite, Monongahela River, Pa., operating and care of Locks and Dams 1 to 7, below Dunkard Creek	499, 561, 766, 767
Permanent indefinite, St. Clair Flats Canal, Mich., operating and care	346, 347
Permanent indefinite, St. Marys Falls Canal, Mich., operating and care	319, 346
Permanent indefinite, wrecks, removal of	329, 330, 891, 892
Permanent "specific," availability of, until expended	225
Printing and binding, requirements regarding exclusion from reports of unnecessary matter, including illustrations	726, 1042, 1137
Printing and binding, restriction upon publication of books by Executive Departments	1138
Prosecution of work, authority for, when available funds or authorizations are insufficient for completion	1056, 1122, 1271
Prosecution of work, prohibition against, except when appropriations are specifically made or contracts authorized	1206
Receipts from various sources not paid into Treasury, annual statement regarding	1205
Slack-water systems, operating and care. <i>See</i> Permanent indefinite, etc., <i>supra</i> .	
Surplus fund. <i>See</i> Balances, <i>supra</i> .	
To be adequate before making of contracts	23
Unexpended balances. <i>See</i> Balances, <i>supra</i> .	
Aquia Creek, Va.:	
Examinations and surveys	196, 527, 1279
Improvement	206, 216, 240, 267, 563, 626, 693, 768, 977
Aransas Bay, Harbor, and Pass, Tex.:	
Half Moon reef, examination and survey	595
Pass, acquisition by U. S. of improvements made by Aransas Pass Harbor Co	816 ² , 817, 854
Pass, improvement by Aransas Pass Harbor Co	542, 671, 736, 854
Pass, improvement by Engineer Department	854, 962, 1098, 1201, 1244
Pass and bay up to Rockport, and to Corpus Christi, examination and survey	278
Pass and bay up to Rockport, and to Corpus Christi, improvement	296, 315, 344, 363, 398, 440, 489
Pass to Corpus Christi, via Turtle Cove, improvement	1244
Pass to Victoria, on Guadalupe River, improvement	1244
Waterway to Pass Cavallo, including channel to Victoria, on Guadalupe River, improvement	1244
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	

Aransas Bay, Harbor, and Pass, Tex.—Continued.	Page.
Waterway to the Rio Grande, including channel to Corpus Christi, via Turtle Cove, examination and survey	1127
Waterway to West Galveston Bay channel at Brazos River, including channel to Victoria and Cuero, on Guadalupe River, examination and survey	1127
Aransas Pass Harbor Company. <i>See</i> Aransas Bay, Harbor, and Pass.	
Arcadia Harbor, Mich.:	
Examinations and surveys	897, 1016
Improvement	1108, 1252
Arcata, Cal. <i>See</i> Humboldt Bay and Harbor.	
Archers Hope River, Va.:	
Examination and survey	299
Improvement	350, 369
Arkansas River:	
<i>See also</i> Western, etc., rivers.	
Dardanelle, Ark., examination and survey	774
Dardanelle, Ark., improvement	452, 503, 504, 873
Discharge measurements. <i>See</i> Gauging, under Mississippi River.	
Fort Gibson, Ind. T., to Wichita, Kansas, examination and survey	390
Fort Smith, Ark., examination and survey	774
Fort Smith, Ark., improvement	261, 268, 407, 452, 503, 504, 873
Fort Smith, Ark., to the Little Arkansas, examination and survey	279
Gauging. <i>See</i> Gauging, under Mississippi River.	
Improvement	60, 72, 82, 87, 119, 171, 175, 289 ² , 315, 316, 339, 345, 373, 378, 407, 452 ² , 503, 504, 569, 570, 632, 633, 698 ² , 774 ² , 873 ² , 985, 1101, 1246
Little Rock, Ark., examination and survey	774
Little Rock, Ark., gauging. <i>See</i> Gauging, under Mississippi River.	
Little Rock, Ark., improvement	873
Little Rock, Ark., to mouth, examination and survey	407
Little Rock, Ark., to Wichita, Kans., examinations and surveys	452, 504
Mississippi and Missouri rivers and, improvement	171, 175, 183, 193, 204, 211, 214, 229, 239, 261, 264, 289, 316, 339, 378
Mississippi, Missouri, and Ohio rivers and, improvement	96, 98, 100, 119, 152
Mississippi River and, improvement	268
Missouri and Mississippi rivers and. <i>See</i> Mississippi and Missouri rivers, etc., <i>supra</i> .	
Missouri, Mississippi, and Ohio rivers and. <i>See</i> Mississippi, Missouri, and Ohio rivers, etc., <i>supra</i> .	
Mouth to Muskogee, Ind. T., examination and survey	1246
Mouth to Wichita, Kans., examination and survey	873
Ohio, Mississippi, and Missouri rivers and. <i>See</i> Mississippi, Missouri, and Ohio rivers, etc., <i>supra</i> .	
Pine Bluff, Ark., examinations and surveys	298, 774, 1246
Pine Bluff, Ark., improvement	320, 345, 373, 407, 452, 873, 1246
Pine Bluff reach, Ark., improvement	503, 504 ²
Redfork, Ark., improvement	698, 925, 1101, 1246
Vanburen, Ark., examination and survey	773
Vanburen, Ark., improvement	503, 504, 873
Water-level observations. <i>See</i> Gauging, under Mississippi River.	
Arkansas, State of:	
Assent of Congress to State legislation for removal of Red River raft	142
Proceeds of sales of lands to be applied to certain internal improvements	92
Army officers:	
<i>See also</i> Engineer officers.	
Employment by Chief of Engineers of retired	792
Those disbursing river and harbor funds not to be bonded	155, 164
Arnaudville, La. <i>See</i> Teche Bayou.	
Aroostook River, Me., examinations and surveys	219, 299
Arrearages:	
<i>See also</i> Examinations and surveys and Preservation and repairs.	
Appropriation for	54, 67, 84, 94, 96, 111
Arrest of offenders against laws for protection, etc., of navigable waters	890, 1122, 1123

	Page.
Arrowrock, Mo. <i>See</i> Missouri River.	
Arroyo Colorado, Tex., examination and survey from Harlingen to Point Isabel, on Laguna Madre	1279
Arsenal Island, Mississippi River. <i>See</i> St. Louis Harbor, etc., under Mississippi River.	
Arthur Kill, N. Y. and N. J. <i>See</i> New York Bay and Harbor and Staten Island-New Jersey channel.	
Arthur Lake (part of Mermentau River), La. <i>See</i> Mermentau River.	
Ashpoo River, S. C.:	
Examination and survey	526
Improvement	205
Waterway from Charleston to Beaufort, S. C., via. <i>See</i> Charleston Harbor.	
Ashes, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Ashland Harbor, Ky. <i>See</i> Ohio River.	
Ashland Harbor, Wis.:	
Examinations and surveys	300, 423
Improvement	443, 492, 555, 621, 687, 758, 859, 924, 970, 1111, 1258
Ashley River, S. C.:	
<i>See also</i> Charleston Neck Canal.	
Examinations and surveys	219, 918
Improvement	319, 343, 404, 448
Ashport, Tenn. <i>See</i> Mississippi River.	
Ashtabula Creek (River) and Harbor, Ohio:	
Control, etc., of flood waters of creek by The Lake Erie and Ohio River Ship Canal Co.	1209
Dredge boat for harbors on Lake Erie (<i>see also</i> Erie Lake)	965, 966
Examinations and surveys	684, 1131
Improvement	34, 42,
51, 56, 60, 63, 67, 71, 80, 85, 100, 122, 126, 138, 153, 161, 192,	
203, 213, 228, 238, 260, 273, 293, 309, 335, 363, 399, 440, 490,	
552, 617, 684, 754, 855, 925, 928, 940, 964, 1025, 1037, 1105, 1249	
Payment to Franklin Lee and Charles F. Dunbar	938
Removal by Lake Shore and Michigan Southern Railway Co. of Government east pier, construction of new pier, and dredging between them	617
Assateague Bay, Md.:	
Examination and survey from Delaware line to Chincoteague Inlet for inlet into the ocean near the Hommacks	209
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Assawaman Bay, Del.:	
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Waterway from Indian River to Isle of Wight and Sinepuxent bays, via. <i>See</i> Indian River.	
Assistant (civilian) engineers. <i>See</i> Employees.	
Assonet River, Mass., examination and survey	896
Astoria, Oreg. <i>See</i> Columbia River.	
Atchafalaya Basin levee board of Louisiana	1014, 1047, 1241
Atchafalaya Bay, La.:	
Examination of channel created by the Morgan Steamship Co.	798
Examinations and surveys	196, 798, 895
Atchafalaya River, La.:	
Berwick Bay, above, examination and survey	419
Berwick Bay to Gulf of Mexico, examinations and surveys	384, 520, 589
Berwick Bay to mouth of Red River, examination and survey	327
Berwick Bay, waterway from Mississippi River to Texas and Mexico, via, shortening of route. <i>See</i> Black (tributary of Bayou Beuf) and Terrebonne bayous.	
Grand Lake, examination and survey	326
Grand Lake, route to Bayou Plaquemine, examination and survey	465
Grand Lake, route to Bayou Plaquemine, improvement. <i>See</i> Grand River.	
Grand Lake to Bayou Teche, canal. <i>See</i> Charenton Canal.	
Mouth, rectification by Mississippi River Commission	382,
461, 512, 577, 578, 639, 704, 785, 880, 999	

	Page.
Atchafalaya River, La.—Continued.	
Mouth, rectification by Mississippi River Commission, authority for allotment to, of funds from appropriations for Mississippi River between Ohio River and Head of Passes.....	1114, 1261
Red River to Brashear, examination and survey.....	219
Atchison, Kans. <i>See</i> Missouri River.	
Atchison, Topeka and Santa Fe Railroad Company, payment to.....	538
Atlantic City Harbor, N. J.:	
<i>See also</i> Absecon Bay and Beach Thoroughfare.	
Absecon Inlet, examinations and surveys.....	325, 421, 800
Absecon Inlet, uniting main channel along Brigantine Beach with waters along Rum Point and with Absecon channel, examination.....	718
Channel back of Brigantine Beach, between Absecon and Brigantine inlets, examination and survey.....	467
Harbor of refuge, examination and survey.....	438
Atlantic City Harbor, Va. <i>See</i> Norfolk Harbor.	
Atlantic coast:	
<i>See also</i> Canals, etc.	
Canal across Florida, and thence along Gulf coast to Mississippi River, survey.....	245
Canal across Florida to Gulf of Mexico, examinations and surveys.....	30,
54, 124, 245, 328	
Deep waterways to the Great Lakes. <i>See</i> Northern and North-western Lakes.	
Dredge boat, appropriation for.....	121
Dredge boats for, north of Cape Henry, not to be constructed without Congressional authority; repeal.....	1057, 1281
Harbor of refuge between Boston, Mass., and Portland, Me. <i>See</i> Sandy Bay.	
Interoceanic canal across isthmus of Panama, surveys for.....	884, 885 ⁴
Repairs, preservation, and contingencies of harbor works.....	124, 144, 145
Rivers and harbors, examinations and surveys.....	151, 160, 185, 195
Transportation routes to the seaboard, survey.....	233, 243
Atlantic Highlands, N. J. <i>See</i> Sandy Hook Bay.	
Atlantic (South) States, removal of water hyacinths. <i>See</i> Water hyacinths.	
Attorney-General:	
<i>See also</i> District attorneys.	
Easements, acquisition of, at private expense, legal proceedings to be conducted by.....	1162, 1197
Easements, examination of titles by, prior to acquisition by United States.....	95, 479
Land, acquisition of, at private expense, legal proceedings to be conducted by.....	1162, 1197
Land, examination of titles by, prior to acquisition by United States.....	95, 479
Legal proceedings in cases of appropriation and use of materials needed in improvements to be conducted by.....	416
Legal proceedings in cases of violations of laws for protection, etc., of navigable waters to be conducted by, etc.....	417, 517 ² ,
580, 581, 583, 584, 887, 889, 890 ² , 891, 893, 906 ² , 908, 1010, 1122, 1123	
Legal proceedings in cases of violations of provisions of special act of 1906, regulating construction of power, etc., dams, to be conducted by.....	1183, 1185
Rights of way, examination of titles by, prior to acquisition by U. S.....	95, 479
Aucilla River, Fla., examination and survey.....	326
Au Gres Harbor and River, Mich., examination and survey.....	522
Augusta, Minn. <i>See</i> Mississippi River.	
Augusta Narrows, White River, Ark. <i>See</i> White River.	
Au Sable Harbor and River, Mich.:	
Establishment of harbor lines.....	226
Examinations and surveys.....	155, 226, 245, 522, 1275
Improvement.....	161, 176, 177, 182, 191, 203, 226, 259, 293, 309, 336, 364, 492
Authorizations, contract, etc. <i>See</i> Contracts.	
Aux Becs Scies Harbor and Lake, Mich. <i>See</i> Frankfort Harbor.	
Awards. <i>See</i> Contracts and Land.	

B.

Babsons ledge, Gloucester Harbor, Mass. <i>See</i> Gloucester Harbor.	Page.
Babylon Creek, N. Y., examination	795
Back Bay of Biloxi, Miss., examinations and surveys	421, 646, 1275
Back Bay (Cove), Portland, Me. <i>See</i> Portland Harbor.	
Back Cove, Portland, Me. <i>See</i> Portland Harbor.	
Back (Sasanoa) River, Me. <i>See</i> Sasanoa River.	
Back (Weymouth) River, Mass. <i>See</i> Weymouth River.	
Back River, Va., examination of Harris Creek prong	720
Back Sound, N. C. <i>See</i> Beaufort Harbor, Core Sound, and Norfolk Harbor waterways.	
Bad River, Mich.:	
Diversion to Saginaw River of unexpended balance of appropriation for improvement	1109
Examinations and surveys	716, 718
Improvement (under Saginaw River)	991
Bagaduce River, Me.:	
Examinations and surveys	465, 798
Improvement	494, 557, 622, 689, 762, 861, 973
South Fork, examination and survey	645
Bailey, Daniel E., payment to	238
Bakers Bay, Columbia River, Wash. <i>See</i> Columbia River.	
Balances. <i>See</i> Appropriations.	
Baldwin (Parsonage) Creek, or River, N. Y. <i>See</i> Parsonage Creek, or River.	
Ballard Harbor, Wash.:	
<i>See also</i> Waterway to Lake Washington, etc., under Puget Sound.	
Improvement (under Puget Sound-Lake Washington waterway) ..	972, 1117
Ballast, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Baltimore Harbor, Patapsco River, Md.:	
Brewerton channel to Sparrow Point, examination and survey ..	1015
Canal to the Atlantic, via Chesapeake and Delaware bays. <i>See</i> Chesapeake and Delaware Canal.	
Curtis Bay channel, examination and survey	589
Curtis Bay channel, improvement	626, 692, 956, 1038
Harbor, Fort McHenry to mouth of river, examination and survey ..	156
Harbor, improvement, including channel to deep water in Chesapeake Bay above Sandy Point light-house and through York Spit	78, 81, 86, 120, 134, 145, 152, 163, 171, 175, 176, 177, 187, 193, 206, 215, 230, 240, 257, 267, 286, 308, 342, 362, 397, 438, 488, 550, 608, 656, 682, 751, 768, 865, 930, 941, 956, 1088, 1203, 1230, 1293
Harbor, ship channel, examinations and surveys	466, 722, 798
Main ship channel to drawbridge in Bear Creek, Sparrow Point, examination and survey	1015
Southwest Baltimore (Spring Garden) Harbor, improvement	751, 956, 1038, 1230
Southwest Baltimore (Spring Garden) Harbor, Middle Branch, Light Street Bridge to Eutaw street, examination	646
Southwest Baltimore (Spring Garden) Harbor, South Branch, Craighill channel to Light Street Bridge, examination	646
Tonnage duties	15, 16 ¹ , 17, 20 ² , 24, 41, 83, 97, 116, 140
West Branch to head of tidewater, examination and survey	279
Bangor Harbor Me. <i>See</i> Penobscot River.	
Bangs, Barker, Williams &, claims of	237
Barataria Bay, La.:	
New Orleans, La., to the Gulf (Grand Pass), via, examination and survey	326
New Orleans, La., to the Gulf, via Barataria Ship Canal and. <i>See</i> Barataria Ship Canal.	
Barataria Bayou, La. <i>See</i> Barataria Bay.	
Barataria (Grand) Pass, La., to New Orleans. <i>See</i> Barataria Bay and Barataria Ship Canal.	
Barataria Ship Canal, La., construction authorized; grant of right of way	266
Barataria Ship Canal Company	266
Barcelona (Portland) Harbor, N. Y. <i>See</i> Portland Harbor.	
Barges. <i>See</i> Tolls, Vessels, and Wrecks.	
Bargy, Peter, jr., relief of	65

Bar Harbor, Me. :	Page.
Claim of Thomas Rhys Smith for breakwater construction.....	675
Examination and survey.....	466
Improvement (Mount Desert-Porcupine Island breakwater).....	483,
545, 612, 675, 677, 744, 844, 1220	237
Barker & Williams, claims of.....	237
Barker, Williams & Bangs, claims of.....	237
Bar Lake, Arcadia, Mich. <i>See</i> Arcadia Harbor.	
Bar lakes (North and South), Empire Harbor, Mich. <i>See</i> Empire Bay and Harbor.	
Barnegat Bay, Harbor, and Inlet, N. J. :	
<i>See also</i> Cranberry Inlet.	
Harbor and entrance to inlet, examination.....	646
Mantoloking to Bay Head, examination.....	795
Sound between Great Egg Bay and, examination and survey.....	593
Barnstable Bay, Mass. :	
Canal to Buzzards Bay, including entrances. <i>See</i> Cape Cod Canal.	
East Dennis, survey.....	120
Barques, Pointe aux, Mich. <i>See</i> Pointe aux Barques.	
Barren River, Ky. :	
Acquisition by U. S. of rights, etc., of Green and Barren River Navigation Co.....	419, 453, 505
Examinations and surveys.....	299, 588
Leases for use of surplus water, and of land for mill sites, authorized; itemized statements of moneys received to accompany annual reports.....	572
Bartholomew Bayou, La. and Ark. :	
Examinations and surveys.....	197, 278, 325, 418
Improvement.....	349, 372, 406, 451, 502, 568, 631, 697, 773, 871, 983, 1098, 1242
Bartrand River, S. C., examination.....	796
Bass River Harbor, Mass. :	
Examinations and surveys.....	47, 716, 897
Improvement.....	76, 87
Bastrop Bayou, Tex. :	
Examination and survey.....	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Batchelder, Gideon, et al., relief of.....	106
Batesville Power Company, canal and power station of.....	1188
Bath, Me. <i>See</i> Kennebec and Sasanoa rivers.	
Bath (Town) Creek, Beaufort County, N. C. <i>See</i> Town Creek.	
Baton Rouge, La. <i>See</i> Mississippi River.	
Battery Island, Chesapeake Bay, Md. <i>See</i> Susquehanna River.	
Bay City, Mich. <i>See</i> Saginaw River.	
Bay City, Wis. <i>See</i> Mississippi River.	
Bayfield Harbor, Wis., examination and survey.....	300
Bayou Pierre Lake, La., examination and survey.....	279
Bayou Sara Harbor, La. <i>See</i> Mississippi River.	
Bay Ridge channel, Gowanus Bay, N. Y. <i>See</i> Gowanus Bay, Canal, and Creek.	
Bay River, N. C. :	
Examination and survey.....	388
Waterway to Pamlico River, examination and survey.....	593
Bay Shore, N. Y., examination and survey.....	898
Bay, the, Ark. (tributary of St. Francis River), examination and survey.....	327
Beach Thoroughfare, N. J., examinations and surveys.....	795, 916
Beacons, under the Light-House Board (<i>see also</i> Lights).....	1182
Bear Creek, Md. <i>See</i> Baltimore Harbor.	
Bear Creek, Miss. (branch of Yazoo River), examinations and surveys.....	352
	717, 1276
Bear Creek, or River, Miss. and Tenn. (branch of Tennessee River) :	
Canal to connect Tombigbee and Tennessee rivers, via, examination and survey.....	234
Dams of J. F. Andrews and J. W. Jourdan.....	1216
Dams of North Mississippi Traction Co.....	1148
Examinations and surveys.....	353, 466

	Page.
Bear Creek Harbor (Lake Ontario), N. Y., examination and survey----	208
Bear Out, Biscayne Bay, Fla. <i>See</i> Biscayne Bay.	
Bear River, Cal. <i>See</i> California Débris Commission, California State, and Feather River.	
Bear River, Miss. and Tenn. (branch of Tennessee River). <i>See</i> Bear Creek, or River.	
Beaufort Harbor, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Carrot Island Slough, thence to and through Lewis Thoroughfare to Newport River, examination and survey-----	1018
Clubfoot, Harlowe, and Newport rivers (waterway to Newbern), examination and survey-----	388
Examinations and surveys-----	329, 647, 718, 1277
Improvement --- 78, 81, 342, 370, 404, 439, 488, 551, 616, 751, 958, 1090, 1232	
Waterway to Newbern, improvement-----	370 ² , 439, 488, 1233
Waterway to New River, improvement--- 448, 488, 551, 627, 693, 769, 979, 1233	
Waterway to Pamlico Sound, improvement-----	81, 86.
Beaufort Harbor and River, S. C.:	
Harbor, examination and survey-----	300
River, examinations and surveys-----	526, 1020
River, improvement-----	565, 628, 694, 770, 979
Waterway to Charleston (Mosquito Creek, connection of the South Edisto with the Ashepoo, etc.), examination and survey-----	468
Waterway to Charleston (Mosquito Creek, connection of the South Edisto with the Ashepoo, etc.), improvement-----	979, 1092
Waterway to Savannah, Ga., examination and survey-----	723
Waterway to Savannah, Ga., improvement (under Savannah Har- bor) -----	752, 851
Beaufort Inlet, N. C.:	
Examination and survey-----	917
Improvement -----	1090, 1233
Waterway to Norfolk, Va. <i>See</i> Norfolk Harbor.	
Waterway to Pamlico Sound, examinations and surveys. <i>See</i> waterway to Beaufort Inlet, under Norfolk Harbor.	
Waterway to Pamlico Sound, improvement-----	1233
Beaufort River, S. C. <i>See</i> Beaufort Harbor and River.	
Beaumont, Tex. <i>See</i> Neches River.	
Beaver, Pa. <i>See</i> Beaver and Ohio rivers.	
Beaver Bay, Minn., examination and survey-----	353
Beaver River, Pa.:	
Canal to Lake Erie (Lake Erie and Ohio River Ship Canal) -----	1207
Examination and survey-----	1019
Bedford, Ind. <i>See</i> White River.	
Beechridge, Ill. <i>See</i> Mississippi River.	
Beech River, Tenn., examination and survey-----	1279
Behring (Bering) Sea, Alaska. <i>See</i> Bering Sea.	
Belfast Bay and Harbor, Me.:	
Examinations and surveys-----	244, 523
Improvement ----- 33, 260, 275, 285, 307, 546, 612, 677, 744	
Bellaire, Ohio. <i>See</i> Ohio River.	
Bellamy River, N. H.:	
Examination and survey-----	467
Improvement ----- 494, 558, 623, 689	
Bell, Capt. Edward, process of wing-dam construction-----	260, 261
Belleplaine, Minn. <i>See</i> Minnesota River.	
Belle River, Mich.:	
Examinations and surveys-----	299, 646, 722
Improvement ----- 337, 364, 399, 778, 877	
Bellevue, Iowa. <i>See</i> Mississippi River.	
Bellingham Bay and Harbor, Wash.:	
Bay, examination and survey-----	720
Bay to mouth of Whatcom Creek, at New Whatcom, examination and survey-----	803
Harbor, examination and survey-----	1280
New Whatcom Harbor, improvement -----	972, 1117

Bellingham Bay and Harbor, Wash.—Continued.	
Nooksak River, new cut from head of jam to bay, improvement.....	1004
Nooksak River, prevention of deposits into bay, examination.....	648
Starr rock, improvement (under Puget Sound).....	1119
Belvedere Harbor, Cal., examination and survey.....	1012
Bemidji, Minn. <i>See</i> Mississippi River.	
Bender, Maj. George, relief of.....	73
Bennetts Creek, or River, N. C., examination and survey at and above Gatesville.....	1130
Bennetts Creek, Va.:	
Examination and survey.....	527
Improvement (under Nansemond River).....	497
Bennetts River, N. C. <i>See</i> Bennetts Creek, or River.	
Benton, Fort, Mont. <i>See</i> Fort Benton, under Missouri River.	
Benton Harbor Canal (or channel), Mich. <i>See</i> St. Joseph Harbor and River.	
Bergen Neck, N. J., canal across, examination and survey.....	300
Bergen Point light, N. J., reef at. <i>See</i> Staten Island—New Jersey channel.	
Bering Sea, Alaska:	
<i>See also</i> Alaska.	
Mining for gold, etc., in.....	910, 911
Berkley, Va. <i>See</i> Norfolk Harbor.	
Bernard Bayou, Miss., examinations and surveys to Handsboro.....	421, 646
Berrians Creek, N. Y., examination and survey.....	646
Berrien Springs, Mich. <i>See</i> St. Joseph Harbor and River.	
Berrien Springs Power and Electric Company, dam of.....	1147
Berry Lake, Ind.:	
Canal from Calumet River to Lake Michigan, via, examination and survey.....	520
Examination and survey.....	520
Berwick Branch, Piscataqua River, Me. and N. H., improvement.....	44, 59
Bessemer, Ala., waterway via. <i>See</i> Black Warrior River.	
Beta (dredge), use of, at South Pass, Mississippi River.....	962
Bête Grise Bay, Mich. <i>See</i> Lac La Belle Harbor.	
Beverly Harbor, Mass.:	
Examinations and surveys.....	521, 896, 915, 1128
Improvement.....	951, 1220
Bidders. <i>See</i> Bonds, Contracts, and Proposals.	
Bids. <i>See</i> Bonds, Contracts, and Proposals.	
Big Assawaman Bay, Del.:	
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Waterway from Indian River to Isle of Wight and Sinepuxent bays, via. <i>See</i> Indian River.	
Big Barren River, Ky. <i>See</i> Barren River.	
Big Bayou Meto, Ark., examination and survey.....	386
Big Bear Creek (branch of Tennessee River), Miss. and Tenn. <i>See</i> Bear Creek, or River.	
Big Black River, Miss.:	
Examinations and surveys.....	354, 1017
Improvement.....	406, 451, 568, 631
Big Coal River, W. Va. <i>See</i> Coal River.	
Big Elk River, Oreg., examination.....	796
Big Fork River, Minn., examination and survey.....	1129
Big Hatchie (Hatchee) River, Tenn. <i>See</i> Hatchee River.	
Big Hay Harbor, Fishers Island, N. Y. <i>See</i> West (Hay) Harbor.	
Big Hocking River, Ohio. <i>See</i> Hocking River.	
Big Hocking River, Ohio. <i>See</i> Hocking River.	
Big (Calcasieu) Lake, La. <i>See</i> Calcasieu Lake, River, and passes.	
Big Miami River, Ohio. <i>See</i> Miami River, under Ohio River.	
Big Muscle Shoals Canal, Ala. <i>See</i> Muscle Shoals Canal, under Ten- nessee River.	
Big Sandy Creek, N. Y., examinations and surveys.....	43, 245
Big Sandy River, Tenn., examinations and surveys.....	1131, 1279

	Page.
Big Sandy River, W. Va., Ky., and Va.:	
Headwaters, including Russel Fork (of the Levisa) and Pound River, Va., examination and survey	1279
Levisa Fork, examination and survey (limits not defined)	469
Levisa Fork, improvement	374, 403, 447, 563, 634, 700, 776, 875, 925, 1232
Levisa Fork, mouth of Dismal to Pikeville (or Piketon), examination and survey	245
Levisa Fork, to Grundy, Va., examination and survey	386
Main stream, examination and survey	644
Main stream, improvement	374,
403, 447, 497, 563, 634, 700, 742, 776, 875, 925, 928, 941, 1232	
Main stream, right of way of Kenova and Big Sandy R. R. Co. at Locks 2 and 3	1035
Main stream, and Levisa and Tug forks, improvement	274,
291, 316, 345, 987, 1040, 1103, 1136, 1201	
Main stream, and thence to Pikeville (or Piketon, on Levisa Fork) and mouth of Pond Creek (on Tug Fork), examinations and surveys	520, 875
Main stream, and thence to Pikeville (or Piketon, on Levisa Fork) and Warfield (on Tug Fork), examination and survey	235
Pikeville (or Piketon, on Levisa Fork), Ky., below, examination and survey	235 ^a
Russel Fork (of the Levisa), Va. and Ky., examinations and surveys	588, 1279
Tug Fork, improvement	374, 403, 447, 563, 634, 700, 776, 875, 1232
Big Sarasota Bay, Fla. <i>See</i> Sarasota Bay.	
Big Sioux River, S. Dak., survey for dam for storage of water in Lakes Kampeska and Poinsett	918, 920
Big Sodus Bay, N. Y. <i>See</i> Great Sodus Bay Harbor, N. Y.	
Big Stone Lake, Minn. and S. Dak.:	
Examination and survey of Bois de Sioux River, Lake Traverse, and, for diversion of flood waters of Red River of the North into Minnesota River	1275
Examination and survey to connect, with Lake Traverse Reservoirs. <i>See</i> Minnesota River and Red River of the North.	421
Big Sunflower River, Miss.:	
Examinations and surveys	278, 717, 799, 1129, 1276
Improvement	295,
314, 343, 372, 405, 450, 502, 567, 630, 696, 772, 870, 983, 1097, 1241	
Biloxi Bay and Harbor, Miss.:	
Back Bay. <i>See</i> Back Bay of Biloxi.	
Channel to Ship Island Harbor. <i>See</i> Ship Island Harbor and Pass.	
Dredge boat for harbors and adjacent channels on coast of Mississippi	1240
Examinations and surveys	354, 1275
Improvement	372, 406, 440, 489, 552, 961, 1096, 1240
Binding:	
<i>See also</i> Printing.	
Exclusion from reports of unnecessary matter; certificate as to illustrations, etc	726, 1042, 1137
Restriction upon publication of books by Executive Departments	1138
Birch, Major, payment to	57
Birds Creek, Mich. <i>See</i> Port Austin.	
Birmingham Canal, Ala. (Fivemile Creek to Black Warrior River). <i>See</i> Black Warrior River.	
Biscayne Bay, Fla.:	
Basin, etc., at Miami, construction of, by Florida East Coast Rwy. Co.	960, 1236, 1237
Examinations and surveys	715, 737, 797, 851
Improvement	960, 1038, 1236
Bismarck, N. Dak. <i>See</i> Missouri River.	
Bissels Cove, R. I., examination and survey	385
Bisteneau Lake, La.:	
Examination and survey	389
Improvement	406

	Page.
Black Bayou (tributary of Bayou Bœuf), La. :	
Examinations and surveys.....	326, 589
Examinations and surveys of, with a view to opening a shorter waterway between Mississippi River and Berwick Bay, Texas, and Mexico (<i>see also</i> Rio Grande River).....	521, 589, 645
Improvement.....	349, 372, 406
Black Bayou (tributary of Clear Lake), La., waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Black Bayou (tributary of Sabine River), La. :	
Examination and survey of, for connection between Calcasieu and Sabine lakes.....	589
Waterway from Sabine Pass, Tex., to Calcasieu River, examination and survey.....	386
Blackbird Creek, Del. :	
Examination of Listons Point-Reedy Island dike, Delaware River, with reference to channel to.....	766
Improvement of channel to Delaware River channel, through Listons Point-Reedy Island dike.....	766
Blackford, George A., et al., dam of.....	1140
Black Lake, La., waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Black Lake Harbor, Mich. <i>See</i> Holland Harbor.	
Black River, Ark. and Mo. :	
Examinations and surveys.....	79, 82, 186, 195, 299
Improvement.....	194, 322, 345,
	373, 407, 452, 504, 513, 570, 578, 633, 698, 774, 873, 985, 1101, 1246
Black River, La. :	
<i>See also</i> Ouachita River (for section above Trinity).	
Examination and survey from mouth to Trinity.....	389
Improvement.....	407, 452, 503, 570, 633, 699, 774, 874, 985, 1100
Black River, Lake Superior, Mich. (Gogebic County), examination and survey.....	522
Black River, Mich. (St. Clair County) :	
At mouth, examinations and surveys.....	196, 466
At mouth, improvement.....	203,
	212, 228, 237, 272, 508, 573, 635, 702, 778, 877, 991, 1253
At Port Huron, improvement.....	573, 635, 702, 778, 878, 1253
From mouth, through Port Huron, to Grand Trunk Railroad bridge, examination and survey.....	522
Black River, Mich. (South Haven Harbor). <i>See</i> South Haven Harbor.	
Black River, N. Y. :	
Brownville to Lake Ontario, examination and survey.....	524
Dexter Harbor, examination and survey.....	1130
Harbor at mouth, improvement.....	77, 79, 85, 213
Mouth, examination and survey.....	1130
To harbor at Dexter, examination and survey.....	795
Black River, N. C. :	
Examinations and surveys.....	388, 422
Funds not to be expended prior to cession to U. S. of private rights regarding navigation.....	448
Improvement.....	448, 628, 694, 769, 867, 978, 1091, 1233
Black River, Ohio. <i>See</i> Black River (Lorain) Harbor.	
Black River, S. C., examinations and surveys.....	325, 594, 1020
Black River, Wash. :	
<i>See also</i> Duwamish River.	
Examination and survey.....	595
Black River (Lorain) Harbor, Ohio :	
Examinations and surveys.....	754, 1278
Improvement.....	43, 52, 55, 60, 63, 67, 71, 74, 80, 85, 122, 145,
	153, 208, 213, 228, 238, 260, 275, 309, 335, 363, 399, 440, 490, 552, 618,
	685, 754, 855, 923, 928, 965, 1025, 1037, 1058, 1104, 1134, 1199, 1248
Black Rock Harbor, Conn. :	
<i>See also</i> Bridgeport Harbor.	
Examinations and surveys.....	385, 519, 714
Improvement.....	77, 87, 397, 436, 485, 547, 613, 679

	Page.
Black Rock Harbor, N. Y. <i>See</i> Buffalo Harbor.	
Black, Samuel, relief of	200
Black Walnut Harbor, Md., examination	646
Black Warrior River, Ala.:	
Canal to Tennessee River, survey	196
Daniels Creek to Mulberry and Locust forks, survey	696
Grant to State of Alabama of land in aid of improvement	44, 73
Lock No. 4, above Tuscaloosa, right of way, etc., of Warrior South- ern Rwy. Co. across U. S. lands	948
Locks Nos. 5 and 6, above Tuscaloosa, survey for sites	982
Locust Fork, below, examination and survey	234
Tuscaloosa, above, improvement	405,
450, 501, 567, 630, 696, 771, 815, 870, 928, 941, 981, 982, 1239	
Tuscaloosa, below, improvement	243, 259
268, 287, 314, 344, 372, 405, 450, 501, 567, 630, 696, 771, 870, 926,	
930, 942, 981, 982, 1039, 1059, 1096, 1135, 1200, 1201, 1239, 1292	
Tuscaloosa to Demopolis, including Lock and Dam No. 1 (Tombig- bee River), just below Demopolis, examinations and surveys	518, 913
Tuscaloosa to Sipsey and Mulberry forks, examination and survey	299
Waterway to Fivemile Creek, via Valley River, Bessemer, and Bir- mingham, examinations and surveys	792, 815
Blackwater Bay and River, Fla.:	
Examinations and surveys	328, 1013
Improvement	869, 1093, 1238
Blackwater Creek, or River, Va.:	
Examinations and surveys	235, 1132
Improvement	273, 287, 313, 341, 369, 1232
Blackwater River, Fla. <i>See</i> Blackwater Bay and River.	
Blackwater River, Va. <i>See</i> Blackwater Creek, or River.	
Blaine Harbor, Wash., examination and survey	1280
Blanche, Ala. <i>See</i> Little River.	
Blo (Blue) Buck Point, La. <i>See</i> Sabine Pass Harbor.	
Block Island, R. I.:	
Conveyance of Government wharf to town of New Shoreham	547
Great Salt Pond, examinations and surveys	648, 723, 952
Great Salt Pond, improvement	746, 846, 952, 1083, 1223
Harbor of refuge, etc., examinations and surveys	165, 679, 1278
Harbor of refuge, etc., improvement	184,
193, 207, 217, 231, 241, 260, 320, 360, 396, 436,	
485, 547, 613, 679, 746, 846, 925, 952, 1083, 1222	
Blood River, La. <i>See</i> Tickfaw River.	
Bloomington (Muscatine), Iowa. <i>See</i> Muscatine, under Mississippi River.	
Blossom rock, San Francisco Harbor, Cal. <i>See</i> San Francisco Bay and Harbor.	
Blue Buck Point, La. <i>See</i> Sabine Pass Harbor.	
Bluehill Harbor, Me., examination and survey	590
Blue Ledge, Lake Huron, Mich., examination and survey at	186
Bluff Creek, Miss.:	
Examination and survey	522
Improvement	568
Boards and Commissions:	
Advisory Board of consulting engineers, State of New York, service of Maj. Thomas W. Symons	1047
Board of Engineers for Rivers and Harbors, creation of, duties, etc.	1006, 1007, 1011, 1124, 1281
Board of Internal Improvement, examination of Dismal Swamp Canal	32
Board of Internal Improvement, survey for canal from St. Marys River, Fla., to Gulf of Mexico	30
Board of Internal Improvement, appropriation for surveys and operations	28
California Débris Commission. <i>See</i> California Débris Commission.	
Commissioners of the District of Columbia. <i>See</i> Commissioners, etc.	
Commissioners of Galveston, Tex., resolution of, in re land at Peli- can Spit	1243, 1244
Deep Waterways Board	816, 833, 843, 904

Boards and Commissions—Continued.

Page.

Deep Waterways Commission.....	734, 816
International Waterways Commission, creation of, and expenses and salaries of American members.....	992, 1007, 1205, 1294
International Waterways Commission, regulations for diversion of water from St. Marys River, Mich., for power purposes.....	991, 992
International Waterways Commission, rental of rooms in Washington by American members.....	1282
International Waterways Commission, report and duties of, in re preservation of Niagara Falls.....	1144
International Waterways Commission, service upon, of retired officers of Corps of Engineers.....	1205
Light-House Board, establishment of certain aids to navigation by persons not under control of.....	1182
Mississippi River Commission. <i>See</i> Mississippi River Commission.	
Missouri River Commission. <i>See</i> Missouri River Commission.	
Permanent International Commission of Congresses of Navigation.....	1027
Philippine Commission, improvement under, of rivers and harbors, and erection of various structures in aid of commerce; control of property and rights acquired from Spain.....	1029, 1030, 1063, 1064
St. John River Commission.....	1179
Boats. <i>See</i> Dredge boats, Tolls, Vessels, and Wrecks.	
Boca Ceiga Bay, Fla.:	
Examination and survey from Clearwater Harbor to Tampa Bay, including.....	1273
Examination and survey, including the Narrows into Clearwater Harbor.....	464
Examination and survey of channel from Clearwater Harbor to Tampa.....	385
Boca Grande, Fla. <i>See</i> Charlotte Harbor.	
Bodie Island, N. C. <i>See</i> Roanoke Sound.	
Bœuf Bayou, or River, La. and Ark.:	
Examinations and surveys.....	328, 419, 714
Improvement.....	349, 373, 406, 451, 502, 568, 631, 697, 773, 871, 983, 1098, 1242
Boggs Bay, Va., waterway from Franklin to Cape Charles, via. <i>See</i> Franklin.	
Bogue Chitto, La. <i>See</i> Chitto, Bogue.	
Bogue Falia, La. <i>See</i> Falia, Bogue.	
Bogue Inlet, N. C., examinations and surveys for jetty in Bogue Sound.....	795, 801
Bogue Phalia, Miss. <i>See</i> Phalia, Bogue.	
Bogue Sound, N. C.:	
<i>See also</i> Morehead City.	
Examinations and surveys.....	385, 422
Examinations and surveys for jetty near Bogue Inlet.....	795, 801
Waterways via. <i>See</i> Beaufort Harbor-New River, Beaufort Harbor-Swansboro, and Norfolk Harbor waterways.	
Bois de Sioux River, Minn. and N. Dak.:	
<i>See also</i> Reservoirs, under Red River of the North.	
Examination and survey of Big Stone Lake, Lake Traverse, and, for diversion of flood waters of Red River of the North into Minnesota River.....	1275
Bolivar channel, Galveston Bay, Tex. <i>See</i> Galveston Bay and Harbor.	
Bolivar Lake, Mississippi River. <i>See</i> Mississippi River.	
Bonded warehouses in the Philippines, construction of.....	1029, 1063, 1064
Bonds:	
Of contractors to cover payment of liabilities for labor and material.....	324, 352, 382, 383, 415, 463, 676, 1072
Regulations regarding bids for contracts under War Department.....	264
To be furnished by contractors.....	155
164, 243, 262, 277, 298, 324, 352, 382, 383, 415, 463, 515, 676, 1072	
To be furnished by disbursing officers not of the regular army.....	155, 164
To be furnished by private parties in legal proceedings for acquisition at private expense of lands or easements for Government use.....	1162, 1197
Bonfuca Bayou, La., examination and survey.....	715
Bonita channel, San Francisco Harbor, Cal. <i>See</i> San Francisco Bay and Harbor.	
Bon Secours Bay, Ala., survey for route to Pensacola Bay.....	61

Books :	Page.
<i>See also</i> Compilations.	
Book of Estimates. <i>See</i> Estimates, etc.	
Printing and binding, exclusion of unnecessary matter; certificate as to necessity of printing reports, including illustrations.	726, 1042, 1137
Restriction upon printing of, by Executive Departments.	1138
Booms. <i>See</i> Structures.	
Boone Fork, Kentucky River, Ky. <i>See</i> Kentucky River.	
Boonville, Mo. <i>See</i> Missouri River.	
Boothbay Harbor, Me., examinations and surveys.	794, 896
Boquet (Bouquet) River, N. Y. <i>See</i> Bouquet River.	
Borgne Lake, La. :	
Route from Bayou St. John to Ship Island, Miss., via, examination and survey.	186
Transportation routes to the seaboard, survey (<i>see also</i> Canals, etc.)	233
Boston Harbor, Mass. :	
Allerton Point, examination and survey.	1128
Charles River. <i>See</i> Charles River.	
Chelsea Creek. <i>See</i> Chelsea Creek.	
East Boston channel, examinations and surveys.	645, 722
Fort Point channel, examination and survey.	420
Fort Point channel, and channel leading to wharves of New York and New England R. R., examination and survey.	385
Governors Island, use and improvement by municipality.	949
Great (Winthrop) Head, examination and survey.	1128
Great (Winthrop) Head, improvement.	744
Harbor of refuge between Portland, Me., and. <i>See</i> Sandy Bay.	
Hull, headland, examination and survey.	385
Improvement.	29, 41,
43, 51, 55, 56, 58, 59, 76, 87, 91, 92, 96, 98, 113, 120, 146, 147,	
151 ² , 163, 171, 175, 176, 177 ² , 184, 194, 207, 218, 232, 242, 260, 275,	
295, 310, 333, 360, 396, 435, 484, 546, 612, 678, 744, 809, 828, 840,	
844, 928, 940, 951 ² , 1025, 1037, 1058, 1082, 1134, 1200, 1221 ² , 1292	
Mystic River. <i>See</i> Mystic River.	
Thirty-five-foot channel, examination and survey.	915
Thirty-foot channel, examination and survey.	799
Bouquet River, N. Y., examinations and surveys.	378, 593
Bowen, Franklin, payment to.	600
Bowes, John R., relief of.	128
Boyce Landing, Red River, La. <i>See</i> Red River.	
Brainerd, Minn. <i>See</i> Mississippi River.	
Brandenburg, Ky. <i>See</i> Ohio River.	
Brandywine Creek, or River, Del. :	
<i>See also</i> Wilmington Harbor.	
Examination and survey.	389
Branford Harbor and River, Conn. :	
Examinations and surveys.	386, 913, 1272
Improvement.	953, 1084, 1223
Brazos de Santiago Harbor, Tex. <i>See</i> Brazos Santiago Harbor.	
Brazos River, Tex. :	
Examination and survey (limits not defined).	123
Galveston and Brazos Canal. <i>See</i> Galveston Bay and Harbor and Galveston and Brazos Canal.	
Mouth, acquisition by U. S. of improvements made by Brazos River Channel and Dock Co.	753, 854
Mouth, examinations and surveys.	235, 854, 1244
Mouth, improvement by Brazos River Channel and Dock Co.	530, 854
Mouth, improvement by Engineer Department.	321,
344, 373, 407, 452, 854, 962, 1098, 1201, 1244	
Mouth, and thence 8 miles upstream, examination and survey.	278 ²
Old Washington to Waco, examination and survey.	1099
Old Washington to Waco, improvement.	1099, 1245
Richmond, below, improvement.	773
Richmond to mouth, examination and survey.	648
Richmond to Old Washington, improvement.	985
Velasco Harbor, survey.	123

Brazos River, Tex.—Continued.	Page.
Velasco to Old Washington, improvement.....	1099, 1245
Velasco to Richmond, examination and survey.....	724
Velasco to Richmond, improvement.....	872, 984
Waco to mouth, examinations and surveys.....	235, 595, 919
Waco to Richmond, examination.....	719
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Waterway to Aransas Pass and to Sabine Pass, via West Galveston Bay channel, examination and survey.....	1127
Waterway to Galveston Bay, via Galveston and Brazos Canal and West Galveston Bay, examinations and surveys (<i>see also</i> West Galveston Bay).....	298, 796, 1127
Waterway to Galveston Bay, via Galveston and Brazos Canal and West Galveston Bay, improvement (<i>see also</i> Mouths of tributaries, under Galveston Bay and Harbor, and Galveston and Brazos Canal and West Galveston Bay).....	1244
Brazos River Channel and Dock Company. <i>See</i> Brazos River.	
Brazos San Jago Harbor, Tex. <i>See</i> Brazos Santiago Harbor.	
Brazos Santiago Harbor, Tex.:	
Channel to Point Isabel, through Laguna Madre. <i>See</i> Laguna Madre.	
Examinations and surveys.....	123, 186, 900
Improvement.....	272, 323, 350, 363, 398, 440, 489, 719
Breakwaters. <i>See</i> Structures.	
Breton Bay, Md.:	
Examinations and surveys.....	235, 896
Improvement.....	276, 286, 308, 334, 362, 398, 438, 488, 550, 956, 1088
Brick, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Brickyard Creek (part of Beaufort River), S. C. <i>See</i> Beaufort Harbor and River.	
Brickyard, the, Beaufort River, S. C. <i>See</i> Beaufort Harbor and River.	
Bridesburg, Pa. <i>See</i> Delaware Bay and River.	
Bridgeport Harbor, Conn.:	
<i>See also</i> Black Rock Harbor.	
Examinations and surveys.....	156, 185, 679, 838, 1125
Improvement.....	77,
124, 194, 207, 217, 232, 242, 258, 275, 285, 307, 333, 360, 396,	
436, 485, 547, 613, 679, 746, 828, 846, 928, 941, 1084, 1199, 1223	
Yellow Mill Pond, examination and survey.....	838
Yellow Mill Pond, improvement.....	746, 828
Bridges:	
Construction of, general provisions of law regarding.....	582 ² ,
583, 584, 642 ² , 886, 887, 890, 893, 906, 1010	
Construction of, general provisions of law regarding, to apply to Illinois and Mississippi Canal.....	886, 1009
Damage or danger to property from currents deflected by piers or abutments, provisions of law regarding.....	515
Draws, opening of, regulations, etc., governing.....	711, 890, 1008
Huron Lake to Lake Erie, channel from, investigation relative to construction of railroad, with regard to interests of navigation..	219
Mississippi River, placing sheer booms on piers to facilitate rafting..	253
Mississippi River, St. Paul to St. Louis, construction of railroad, with regard to interests of navigation.....	156
Obstructing navigation, alteration of.....	417,
517 ² , 580, 581, 584, 890, 891, 893, 1010	
Obstructing navigation, alteration of, by U. S. upon failure of owners, etc., to do so.....	417
Obstructing navigation, cases of those erected or in process of erection, with method of altering to prevent such obstruction, to be reported to Congress.....	414, 415, 462
Ohio River, obstructing navigation; modifications required, with cost; legislation necessary to secure alterations; opinion of Attorney-General.....	187, 990
Plans, sites, etc., examination of, funds applicable for payment of expenses incurred subsequent to March 3, 1905.....	1123
Plans, sites, etc., examination of, funds applicable for payment of expenses incurred prior to March 3, 1905. <i>See</i> Examinations and surveys.	

	Page.
Brier Creek, Ga., examination and survey-----	1126
Brigantine Beach, N. J. <i>See</i> Atlantic City Harbor.	
Bristol bar, Patuxent River, Md. <i>See</i> Patuxent River.	
Broad Bay, Va.:	
Examination and survey-----	298
Waterway from Lynnhaven Bay to Elizabeth River, via. <i>See</i> Lynnhaven Bay.	
Broad Creek (Broad Creek River), Del. <i>See</i> Broad Creek River.	
Broad Creek, Md., examinations and surveys-----	353, 589
Broad Creek River, Del.:	
Application to Nanticoke River of appropriation for-----	691
Examinations and surveys-----	300, 586
Improvement -----	320, 340, 368, 496, 625, 691, 767, 865, 1230
Improvement (with appropriation for Nanticoke River) -----	446
Broadkill Creek, or River, Del.:	
Examinations and surveys-----	715, 1126
Improvement -----	216, 320, 340, 368, 496, 1230
Waterway to Mispillion River, via Cedar, Slaughter, and Prime- hook creeks, examination-----	643
Broadkill (Broadkill) Creek, or River, Del. <i>See</i> Broadkill Creek, or River.	
Broad River, N. C. and S. C., examinations and surveys-----	300, 387, 526, 1278
Brodie, Charles, relief of administratrix of-----	137
Brodie, Lucretia A., relief of-----	137
Bronx Kills, N. Y. <i>See</i> Harlem River.	
Bronx River, N. Y.:	
Examinations and surveys-----	324, 593
Improvement -----	764, 863, 974, 1086, 1226
Brooklyn Harbor, Mississippi River, Ill. <i>See</i> Mississippi River.	
Brooklyn Harbor, Ohio River, Ill. <i>See</i> Ohio River.	
Brooklyn Harbor, Me. <i>See</i> Center Harbor.	
Brooklyn Harbor, N. Y. <i>See</i> Buttermilk channel, East River, Gowanus Bay, Canal, and Creek, Newtown Creek, and New York Bay and Har- bor, etc.	
Brothertown Harbor, Wis. <i>See</i> Fox River.	
Brown, Fort, Tex. <i>See</i> Rio Grande River.	
Brown, John B., payment to-----	190
Browns Creek, N. Y.:	
Examination and survey-----	524
Improvement -----	559, 624, 690, 764, 863, 1086, 1227
Brownstown, Mich. <i>See</i> Detroit River.	
Brownville, Nebr. <i>See</i> Missouri River.	
Brown, William G., relief of-----	144
Bruce, John, relief of-----	69
Brucken, Anton, construction of locks and dams in Pond River, Ky-----	1031
Brunswick Harbor, Ga.:	
Inner harbor, examinations and surveys-----	894, 1092, 1126
Outer bar, examination by Engineer Department of work done by C. P. Goodyear-----	653, 667
Outer bar, examination by Board of officers of work done by C. P. Goodyear -----	683, 752
Outer bar, examination by Coast and Geodetic Survey of work done by C. P. Goodyear-----	752
Outer bar, examinations and surveys by Engineer Department-----	587,
850, 1092, 1126	
Outer bar, improvement by C. P. Goodyear-----	652, 666, 682, 752, 850, 959
Outer and inner harbors, improvement by Engineer Department-----	78,
296, 308, 335, 363, 398, 439, 488, 551, 616, 682, 752, 850, 959, 1092, 1235	
Route to Altamaha River. <i>See</i> Club and Plantation creeks.	
Wharfage privileges and charges, inquiry relative to discriminations in-----	1235
Brunswick Harbor, Me., examination and survey-----	353
Brunswick Harbor, Mo. <i>See</i> Grand River, under Missouri River.	
Brunswick River, N. C., improvement (under Cape Fear River)-----	978
Buckhannon River, W. Va.:	
Examination and survey-----	388
Improvement-----	403, 447, 497, 563

	Page.
Buck rapids, Missouri River, Mont. <i>See</i> Missouri River.	
Buckshutem Creek, N. J., examination and survey-----	718
Bucksport Harbor, Me. <i>See</i> Penobscot River.	
Bucksport Narrows, Penobscot River, Me. <i>See</i> Penobscot River.	
Buckstaff, George H., payment to-----	477, 536, 600
Buffalo Bayou, Tex.:	
<i>See also</i> Buffalo Bayou Ship Channel Company.	
Examination and survey-----	327
Improvement-----	350, 373, 407, 452, 503, 569, 632, 698, 773, 806, 906
Waterway to Galveston, via. <i>See</i> Galveston Bay and Harbor.	
Buffalo Bayou Ship Channel Company, acquisition by U. S. of Morgan	
Cut and Canal; tolls, including those for Buffalo Bayou-----	291, 398, 585
Buffalo Creek, or River, N. Y. <i>See</i> Buffalo Harbor.	
Buffalo Fork, White River, Ark. <i>See</i> White River.	
Buffalo Harbor, N. Y.:	
Black Rock Harbor, improvement----	47, 52, 57, 59, 67, 1085, 1201, 1225, 1292
Black Rock Harbor, improvement, expenditure of funds conditioned	
upon construction of barge canal by State of New York-----	1085
Black Rock Harbor, improvement, sharing of expense of, by riparian	
owners-----	1085
Black Rock Harbor, rapids and shoals at head of Niagara River,	
examination and survey-----	1018
Black Rock Harbor, waterworks tunnels, etc., under Lake Erie,	
Niagara River, Fort Porter lands, and-----	1075, 1187
Black Rock Harbor, waterworks tunnel, etc., under Niagara River	
and-----	179, 200
Black Rock Harbor and Erie Basin, Buffalo entrance, examination	
and survey-----	801
Black Rock Harbor and Erie Basin, Buffalo entrance, improvement.	846, 928
Black Rock Harbor and Erie Basin, Lake Erie entrance, examina-	
tion and survey-----	916
Black Rock Harbor and Erie Basin, Lake Erie entrance, improve-	
ment-----	955, 1038, 1058, 1135, 1200
Erie Basin, claim of Olivia M. Clifford for alleged use of docks at--	938
Erie Basin, examination and survey-----	1017
Harbor, contract of January 20, 1868, may be extended or contin-	
ued-----	197
Harbor, improvement-----	33, 42, 52, 56, 59, 63, 67, 87, 100,
122, 126, 128, 145, 147, 153, 162, 176, 177, 183, 192, 197, 203, 213,	
221, 228, 238, 255, 273, 293, 307, 334, 361, 397, 437, 485, 548, 614,	
680, 747, 810, 828, 840, 846, 922, 940, 955, 1025, 1085, 1134, 1225 ²	
Harbor, outer breakwater, examinations and surveys-----	680, 1130
Scajacuada Creek, examination and survey-----	422
Ship channel in waters connecting Great Lakes between Chicago,	
Duluth, and. <i>See</i> Northern and Northwestern Lakes.	
Buffalo River, Miss., examination and survey-----	421
Buffalo River, N. Y. <i>See</i> Buffalo Harbor.	
Buffington Island, Ohio River, W. Va. <i>See</i> Ohio River.	
Buildings:	
<i>See also</i> Dams, Locks, and Structures.	
Estimates of appropriations for, requirements regarding-----	105
Funds not to be expended prior to examination by Attorney-General	
of title to land and cession of jurisdiction by State-----	95, 479
Protection of persons furnishing materials and labor-----	324
352, 382, 383, 415, 463, 676, 1072	
Bulkhead lines. <i>See</i> Harbor lines.	
Bulkhead rock, Providence River, R. I. <i>See</i> Providence Harbor and	
River.	
Bulkheads. <i>See</i> Harbor lines and Structures.	
Bullis, Spencer S., payments to, and annulment of contract, Gulfport-	
Ship Island Harbor channel, Miss-----	1177, 1240
Bull River, S. C. <i>See</i> Salkahatchie River.	
Bulls Bay, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Waterway from Santee River, to and opposite McClellanville, to	
Charleston, via Alligator Creek, or River, Wando and Owendaw	
rivers, and. <i>See</i> Charleston Harbor.	

		Page.
Buoys:		
Erection of, in the Philippines	1029, 1030, 1063, 1064	
Erection of, under the Light-House Board		1182
Burdick, Joseph C., payment to	392, 477 ² , 536, 599	
Burlington Bay, Minn., examinations and surveys		421, 916
Burlington Harbor, Iowa. <i>See</i> Mississippi River.		
Burlington Harbor, Vt.:		
<i>See also</i> Champlain Lake.		
Examinations and surveys		156, 1279
Improvement	77, 80, 85, 100, 123, 144, 145, 152, 162, 183, 192, 204, 213, 229, 239, 256, 277, 286, 307, 333, 360, 396, 435, 484, 546, 677, 744, 844, 925, 950, 1081, 1292	
Burr Creek, Conn. <i>See</i> Bridgeport Harbor.		
Burtens Bay, Va., waterway from Franklin to Cape Charles, via. <i>See</i> Franklin.		
Bush Creek, Va., dredging of		1199
Bush River, Md., examination and survey		355
Buttermilk channel, New York Harbor, N. Y.:		
<i>See also</i> New York Bay and Harbor.		
Examinations and surveys		592, 800, 916
Improvement	319, 339, 361, 397, 437, 485, 615, 681, 748, 809, 828, 954	
Buzzards Bay, Mass. <i>See</i> Cape Cod Canal <i>and</i> Weepecket rock.		
Byram Harbor, Conn., examination		714
Byram River, N. Y. and Conn. <i>See</i> Port Chester Harbor.		
Byrams Cove Harbor, Mass., examination		716
Byrne & Speed, basin in Louisville and Portland Canal, Ky		601
C.		
Caballo (Cavallo) Pass, Tex. <i>See</i> Cavallo Pass.		
Cabin Creek, Md., examination and survey		298
Cache River, Ark.:		
Examinations and surveys	186, 327, 463, 714, 1125	
Improvement	504, 633, 699, 774, 873, 985, 1101, 1246	
Cache River, Ill., prevention of break from Mississippi River. <i>See</i> Beechridge, under Mississippi River.		
Caddo Lake, Tex. and La. <i>See</i> Cypress Bayou.		
Cahaba Navigation Company. <i>See</i> Cahawba Navigation Company.		
Cahaba River, Ala.:		
Examinations and surveys	234, 327	
Improvement	380, 405, 450, 567, 630	
Improvement, grant to State of land in aid of		44, 73
Incorporation of Cahawba Navigation Company		46
Cahawba Navigation Company, incorporation of		46
Cahawba (Cahaba) River, Ala. <i>See</i> Cahaba River.		
Cahokia Chute, Mississippi River. <i>See</i> St. Louis Harbor, etc., under Mississippi River.		
Cairo, Ill. <i>See</i> Mississippi <i>and</i> Ohio rivers.		
Calais, Me. <i>See</i> St. Croix River.		
Calaveras River, Cal., canal to Mormon Channel, or Slough. <i>See</i> San Joaquin River.		
Calcasieu Lake, River, and passes, La.:		
Improvement	205, 349 ² , 373 ² , 406, 452, 503, 552, 617, 684, 753, 853, 962, 1097, 1241	
Lake, examination and survey		1127
Passes, examinations and surveys	196, 465, 520, 1127	
River, examination and survey (limits not defined)		326
River, mouth, examinations and surveys		465, 520
River, mouth to head of navigation, examination and survey		1127
Water hyacinths, removal of. <i>See</i> Water hyacinths.		
Waterway from Mississippi River at Donaldsonville to the Rio Grande. <i>See</i> Donaldsonville, under Mississippi River.		
Waterway to Sabine Lake, Tex., via Bayou Black, examination and survey		589
Waterway to Sabine Pass, Tex., examination and survey		386
California Débris Commission:		
Creation, duties, etc., of		659, 1218
Examinations, surveys, appropriations, hydraulic mining, etc. <i>See</i> California State.		

California, State of:	Page.
<i>See also</i> California Débris Commission.	
Appropriations for construction of restraining barriers.....	664,
665, 787, 829, 882 ² , 922, 1001	
Appropriations for expenses of California Débris Commission.....	610, 665,
805, 816, 819 ² , 832, 835, 842, 931, 939, 942,	
944, 1026, 1041, 1060, 1137, 1198, 1205, 1294	
Appropriations for expenses of California Débris Commission, provisions regarding traveling expenses and mileage.....	842, 931
Débris fund, creation of, etc., in connection with hydraulic mining.....	664, 1218
Examination and survey of Sacramento, San Joaquin, and Feather rivers and their tributaries, with a view to improvement in conjunction with.....	1116
Examinations and surveys of Sacramento, San Joaquin, and Feather river systems for protection, etc., from injury from mining débris.....	329, 533, 659
Institution of legal proceedings to prevent unlawful hydraulic mining in Sacramento, Feather, and San Joaquin river systems.....	457, 663, 664
Receipt and use by U. S. of State dredge and other appliances.....	882
Receipt and use by U. S. of State funds for construction of restraining barriers.....	787, 829, 882 ² , 922, 1002
Rules, etc., for regulation of hydraulic mining.....	659, 1218
Use by California Débris Commission of public lands and materials; withdrawal of such lands from sale and entry.....	663
Call & Co., Day, contractors, payment to laborers employed under.....	391
Calloway, Shade, relief of.....	140
Caloosahatchee River, Fla.:	
Examinations and surveys.....	278, 793, 894 ² , 1126, 1273
Improvement.....	380, 405, 449, 501, 567, 629, 695, 771, 868, 980, 1094, 1238
Puntarasa Harbor, and inside route thence to Charlotte Harbor (Pine Island Harbor, or Sound). <i>See</i> Puntarasa Harbor.	
Waterway across Florida, via. <i>See</i> Florida State, canal across.	
Waterway from Kissimmee River to Gulf of Mexico, via, examination and survey.....	894
Calumet Harbor, Wis. <i>See</i> Fox River.	
Calumet Harbor and River, Ill. and Ind.	
Anchorage grounds and movement of vessels in Chicago Harbor and adjacent waters of Lake Michigan.....	657
Harbor, examinations and surveys.....	644, 685
Harbor improvement.....	192
202, 212, 227, 237, 260, 272, 292, 309, 336, 364, 399, 441,	
490, 553, 619, 685, 756, 856, 928, 941, 966, 1025, 1037, 1259	
Harbor of refuge at Chicago, improvement.....	184
River, abandonment of part of old channel, and establishment of new channel lines, near Chittenden Road Bridge.....	1048
River, examinations and surveys (limits not defined).....	388, 520
River, the forks, at Lake Calumet, to 122d street, examination and survey.....	1273
River, the forks, at Lake Calumet, to Riverdale, Ill., and thence to Blue Island, examination and survey.....	464
River, improvement.....	409
456, 509 ² , 574, 636, 703, 780, 879, 994, 1112, 1201, 1259, 1293	
River, mouth, examination and survey.....	209
River, Hammond, Ind., one-half mile east of, to Lake Michigan, examinations and surveys.....	520, 994
River, Hammond, Ind., one-half mile east of, to the forks, examination and survey.....	418
River, Hammond, Ind., one mile east of, to Lake Michigan, via Berry Lake, canal, examination and survey.....	520
River, to Lake Calumet, ship canal, examination and survey.....	418
River, mouth to the forks, at Lake Calumet, dock lines.....	364
River, mouth to the forks, at Lake Calumet, examination and survey.....	364
River, South Chicago (Calumet), Ill., to Pullman, on Lake Calumet, examination and survey.....	354
Calumet Lake, Ill. and Ind. <i>See</i> Calumet Harbor and River.	

Calumet River, Ill. and Ind. <i>See</i> Calumet Harbor and River.	Page.
Cambridge Harbor, Md.:	
Examinations and surveys	187, 466, 798
Improvement	193, 206, 216, 276, 295, 488, 551, 615, 957, 1088, 1230
Camden Harbor, Me.:	
Examinations and surveys	210, 465, 896, 1274
Improvement	217, 232, 242, 483, 545, 611, 677, 744, 950
Camden Harbor, N. J. <i>See</i> Philadelphia, under Delaware Bay and River, <i>and</i> Cooper Creek.	
Canada, Dominion of:	
Control and regulation in re diversion of water from Niagara River, N. Y., and tributaries, and preservation of Niagara Falls. <i>See</i> Niagara River.	
Dam across St. Lawrence River between Adams and Les Galops islands	1022
International Waterways Commission. <i>See</i> Boards, etc.	
St. John River Commission	1179
Canals and waterways:	
<i>See also</i> Rivers and harbors, Navigable waters, <i>and</i> Tolls.	
Absecon Bay, N. J., Barnegat Bay to Great Egg Harbor Bay, via. <i>See</i> Barnegat Bay, Harbor, and Inlet.	
Absecon Bay, N. J., Cape May to Great Bay, via. <i>See</i> Cape May.	
Alabama-Mississippi State line to Chattahoochee River, opposite West Point, Ga., internal improvement. <i>See</i> Alabama State.	
Alabama, State of, proceeds of sales of lands to be applied to construction of. <i>See</i> Alabama State.	
Albemarle and Chesapeake Canal, N. C. <i>See</i> Albemarle and Chesapeake Canal.	
Albemarle Sound, N. C., to and by way of. <i>See</i> Albemarle Sound <i>and</i> Norfolk Harbor waterways.	
Alexandria Canal, D. C. and Va. <i>See</i> Alexandria Canal.	
Alligator Creek, or River, S. C., via. <i>See</i> Charleston Harbor.	
Altamaha River, Ga., to Brunswick. <i>See</i> Club <i>and</i> Plantation creeks.	
Apalachicola Bay and River, Fla., to St. Marys River. <i>See</i> Apalachicola Bay and River.	
Appropriations, permanent indefinite, for operating and care. <i>See</i> Appropriations.	
Arkansas, State of, proceeds of sales of lands to be applied to construction of. <i>See</i> Arkansas State.	
Ashpoo River, S. C., via. <i>See</i> Charleston Harbor.	
Assateague Bay, Md., Chincoteague Bay to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Assawaman Bay, Del., Chincoteague Bay to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Assawaman Bay, Del., Indian River to Isle of Wight and Sinepuxent bays, via. <i>See</i> Indian River.	
Atchafalaya River, La., Berwick Bay, waterway from Mississippi River to Texas and Mexico, via. <i>See</i> Black Bayou (tributary of Bayou Boeuf), Rio Grande River, <i>and</i> Terrebonne Bayou.	
Atchafalaya River, La., from Grand Lake to Bayou Teche. <i>See</i> Charenton Canal.	
Atlantic coast to Great Lakes. <i>See</i> Northern and Northwestern Lakes.	
Atlantic coast to Gulf of Mexico. <i>See</i> Atlantic coast.	
Atlantic coast, transportation routes to. <i>See</i> Atlantic coast.	
Atlantic Ocean to the Pacific. <i>See</i> Atlantic coast.	
Bakers Bay, Columbia River, Wash., to Willapa Harbor (Shoalwater Bay). <i>See</i> Columbia River.	
Barataria Bay, La., Barataria Ship Canal route through, to New Orleans. <i>See</i> Barataria Ship Canal.	
Barataria Bay, La., route from Grand Pass to New Orleans, via. <i>See</i> Barataria Bay.	
Barataria (Grand) Pass, La., to New Orleans. <i>See</i> Barataria Bay <i>and</i> Barataria Ship Canal.	
Barataria Ship Canal, La. <i>See</i> Barataria Ship Canal.	
Barnegat Bay, N. J., to Great Egg Harbor Bay. <i>See</i> Barnegat Bay, Harbor, and Inlet.	

Canals and waterways—Continued.

- Barnstable Bay, Mass., to Buzzards Bay. *See* Cape Cod Canal.
- Bay River, N. C., to Pamlico River. *See* Bay River.
- Bear Creek, or River (branch of Tennessee River), Miss. and Tenn., via. *See* Bear Creek, or River.
- Beaufort, N. C., to Newbern. *See* Beaufort Harbor.
- Beaufort, N. C., to New River. *See* Beaufort Harbor.
- Beaufort, N. C., to Pamlico Sound. *See* Beaufort Harbor.
- Beaufort Harbor and River, S. C., to Charleston. *See* Beaufort Harbor and River.
- Beaufort Harbor and River, S. C., to Savannah, Ga. *See* Beaufort Harbor and River.
- Beaufort Inlet, N. C., to Pamlico Sound and to Norfolk. *See* Beaufort Inlet and Norfolk Harbor.
- Beaufort River, S. C. *See* Beaufort Harbor and River, *supra*.
- Beaver River, Pa., via. *See* Lake Erie and Ohio River Ship Canal.
- Benton Harbor Canal, Mich. *See* St. Joseph Harbor and River.
- Bergen Neck, N. J., across. *See* Bergen Neck.
- Berry Lake, Ind., via. *See* Berry Lake.
- Berwick Bay, Atchafalaya River, La., waterway from Mississippi River to Texas and Mexico, via. *See* Black Bayou (tributary of Bayou Boeuf), Rio Grande River, and Terrebonne Bayou.
- Big Assawaman Bay, Del., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Big Assawaman Bay, Del., Indian River to Isle of Wight and Sinepuxent bays, via. *See* Indian River.
- Big Bear Creek (branch of Tennessee River), Miss. and Tenn., via. *See* Bear Creek, or River.
- Big Muscle Shoals Canal, Ala. *See* Muscle Shoals Canal, etc., under Tennessee River.
- Birmingham Canal, Ala. (Black Warrior River to Fivemile Creek). *See* Black Warrior River.
- Black Bayou (tributary of Clear Lake), La., waterway from Shreveport to Fulton, via. *See* Shreveport.
- Black Bayou (tributary of Sabine River), La., via. *See* Black Bayou.
- Black Lake, La., waterway from Shreveport to Fulton, via. *See* Shreveport.
- Black Warrior River, Ala., to Fivemile Creek. *See* Black Warrior River.
- Black Warrior River, Ala., to Tennessee River. *See* Black Warrior River.
- Bloomington (Muscatine), Iowa, to Cedar River. *See* Cedar River.
- Boats, sunken. *See* Wrecks.
- Bon Secours Bay, Ala., to Pensacola Bay. *See* Bon Secours Bay.
- Brazos River, Tex., to Galveston. *See* Brazos River.
- Brazos River, Tex., to West Galveston Bay. *See* Galveston and Brazos Canal.
- Broad Bay, Va., Lynnhaven Bay to Elizabeth River, via. *See* Lynnhaven Bay.
- Broadkill Creek, or River, Del., to Mispillion River. *See* Broadkill Creek, etc.
- Brunswick, Ga., to Altamaha River. *See* Club and Plantation creeks.
- Bulls Bay, S. C., via. *See* Charleston Harbor.
- Buzzards Bay, Mass., to Barnstable Bay. *See* Cape Cod Canal.
- Caddo Lake, Tex. and La., via. *See* Cypress Bayou.
- Calaveras River, Cal., to Mormon Channel, or Slough. *See* San Joaquin River.
- Calcasieu Lake and River, La., to Sabine Lake and Pass, Tex. *See* Calcasieu Lake, River, and passes.
- Caloosahatchee River, Fla., via. *See* Florida State, canal across.
- Calumet Lake, Ill. and Ind., to Calumet River. *See* Calumet Harbor and River.
- Calumet River, Ind., to Lake Calumet. *See* Calumet Harbor and River.
- Calumet River, Ind., to Lake Michigan, via Berry Lake. *See* Calumet Harbor and River.

Canals and waterways—Continued.

- Cape Charles, Va., to Franklin. *See* Cape Charles.
 Cape Cod Canal, Mass. *See* Cape Cod Canal.
 Cape Fear River, N. C., to Neuse River. *See* Cape Fear River.
 Cape Fear River, N. C., to Norfolk, Va. *See* Cape Fear River.
 Cape Fear River, N. C., to Waccamaw River. *See* Cape Fear River.
 Cape May, N. J., to Great Bay, waterway. *See* Cape May.
 Care, maintenance, etc., charges, levying of, abolished. *See* Tolls.
 Care, maintenance, etc., permanent indefinite appropriations for.
See Appropriations.
 Carondelet Canal, La. *See* Carondelet Canal.
 Cascades Canal, Columbia River, Oreg. *See* Columbia River.
 Cedar Creek, Del., via. *See* Cedar Creek.
 Cedar Keys Harbor, Fla., to Clearwater Harbor and Tampa. *See*
 Cedar Keys Harbor.
 Cedar Keys Harbor, Fla., to Suwanee River. *See* Cedar Keys
 Harbor.
 Cedar River, Iowa, to Mississippi River. *See* Red Cedar River.
 Charenton Canal, La. *See* Charenton Canal.
 Charles, Cape, Va., to Franklin. *See* Cape Charles.
 Charleston Neck Canal, S. C. *See* Charleston Neck Canal.
 Charleston, S. C., to Beaufort, S. C. *See* Charleston Harbor.
 Charleston, S. C., to Bulls Bay, Santee River, and to and oppo-
 site McClellanville. *See* Charleston Harbor.
 Charleston, S. C., to Chesapeake Bay. *See* Charleston Harbor.
 Charlotte Harbor, Fla., to St. Johns River. *See* Charlotte Harbor.
 Chattahoochee River, opposite West Point, Ga., to Alabama State
 line, toward Jackson, Miss., internal improvement. *See* Chat-
 tahoochee River.
 Chattahoochee River to St. Andrews Bay, Fla. *See* Chattahoochee
 River.
 Chesapeake and Delaware Canal. *See* Chesapeake and Delaware
 Canal.
 Chesapeake and Ohio Canal. *See* Chesapeake and Ohio Canal.
 Chesapeake Bay to Delaware Bay. *See* Chesapeake and Delaware
 Canal.
 Chesapeake Bay to sounds of North Carolina and southward.
See Norfolk Harbor waterways.
 Chicago Drainage Canal, Ill. *See* Sanitary District of Chicago.
 Chicago Harbor and River, Ill., to Illinois River. *See* Illinois and
 Michigan Canal and Illinois River.
 Chicago Harbor and River, Ill., to Mississippi River, via Illinois
 and Des Plaines rivers, etc. *See* Michigan Lake.
 Chincoteague Bay, Va., at Franklin, to Cape Charles. *See* Franklin.
 Chincoteague Bay, Va., to Delaware Bay. *See* Chincoteague Bay
 and Inlet.
 Choctawhatchee Bay and River to St. Andrews Bay, Fla. *See*
 Choctawhatchee Bay and River.
 Cincinnati, Ohio, to Toledo. *See* Miami and Erie Canal.
 Clear Lake, La., waterway from Shreveport to Fulton, via. *See*
 Shreveport.
 Clearwater Harbor, Fla., to Cedar Keys and Tampa. *See* Clear-
 water Harbor.
 Clinton and Kalamazoo Canal, Mich. *See* Clinton River.
 Club Creek, Ga., via. *See* Club Creek.
 Clubfoot and Harlowe Canal, N. C. *See* Norfolk Harbor waterways.
 Cod, Cape, Mass., across. *See* Cape Cod Canal.
 Colbert Shoals Canal, Ala. *See* Tennessee River.
 Colorado, State of, certain proceeds of sales of lands to be applied
 to internal improvements. *See* Colorado State.
 Columbia River, Oreg. and Wash., to, etc. *See* Columbia River.
 Coney Island Point, N. Y., to Rockaway Inlet. *See* Coney Island
 Point.
 Cooper River, S. C., to Santee River. *See* Santee Canal.
 Coosa River to Tennessee River. *See* Coosa River.
 Coosa River, transportation route to seaboard, via. *See* Coosa
 River.

Canals and waterways—Continued.

- Cornells Creek and Landing, N. Y., to Jamaica Bay. *See* Cornells Creek and Landing.
- Craft, sunken. *See* Wrecks.
- Cross Bayou, La., to Twelvemile Bayou. *See* Cross Bayou.
- Cumberland, Md., to Ohio and Potomac rivers. *See* Chesapeake and Ohio Canal.
- Cumberland Sound, Ga. and Fla., via. *See* Cumberland Sound.
- Cut-off Canal, St. Francis River, Mo. *See* St. Francis River.
- Cypress Bayou, Tex. and La., waterway from Shreveport, La., to Fulton, Ark., via. *See* Shreveport.
- Cypress Bayou, Tex. and La., waterway from Shreveport, La., to Jefferson, Tex., via. *See* Cypress Bayou.
- Cypress Brake (Black Lake), La., waterway from Shreveport to Fulton, via. *See* Shreveport.
- Dalles, The (Fivemile) rapids, Columbia River. *See* Columbia River.
- Dams, levying of maintenance, etc., charges. *See* Tolls.
- Dams, maintenance and care, permanent indefinite appropriations for. *See* Appropriations.
- Deep Bay, N. C., to Swan Quarter Bay. *See* Deep Bay.
- Delaware Bay, Del., to Chesapeake Bay. *See* Chesapeake and Delaware Canal.
- Delaware Bay, Del., to Chincoteague Bay. *See* Chincoteague Bay and Inlet.
- Delaware Bay, Del., to Rehoboth Bay. *See* Rehoboth Bay.
- Derelicts, removal of. *See* Wrecks.
- Des Moines rapids, Mississippi River, canal of Des Moines Rapids Power Co. *See* Des Moines rapids, under Mississippi River.
- Des Moines Rapids Canal, Mississippi River. *See* Des Moines rapids, under Mississippi River.
- Des Plaines River, Ill., to Lake Michigan and to Illinois and Mississippi rivers, via. *See* Des Plaines River, Illinois and Michigan Canal, and Michigan Lake.
- Dismal Swamp Canal. *See* Dismal Swamp Canal.
- Doboy Sound, Ga., via. *See* Doboy Sound.
- Donaldsonville, La., to Rio Grande River, Tex. *See* Donaldsonville, under Mississippi River.
- Drummond, Lake, Canal. *See* Dismal Swamp Canal.
- Dues, tonnage, etc., levying of. *See* Tolls.
- Duluth Canal, Minn. *See* Duluth-Superior Harbor.
- Edisto River, S. C., via. *See* Charleston Harbor.
- Elizabeth River, Va., via. *See* Elizabeth River and Norfolk Harbor waterways.
- Elliott Bay, Wash., via. *See* Waterway to Lake Union, etc., under Puget Sound.
- Elliott (Wappoo) Cut, S. C. *See* Wappoo Cut.
- Erie Canal, N. Y., enlargement of. *See* New York State.
- Erie Canal Basin, Buffalo, N. Y. *See* Buffalo Harbor.
- Erie Lake to Cincinnati, Ohio. *See* Miami and Erie Canal.
- Erie Lake to Lake Ontario. *See* Erie Lake.
- Erie Lake to Pittsburg, Pa. *See* Lake Erie and Ohio River Ship Canal.
- Erie Lake to Wabash River. *See* Wabash and Erie Canal.
- Estherville-Minim Creek Canal, S. C. *See* Santee River.
- Examinations. *See* Examinations and surveys.
- Fairy (Caddo) Lake, Tex. and La., via. *See* Cypress Bayou.
- Falls of Ohio River at Louisville, Ky. *See* Falls at Louisville, etc., under Ohio River.
- Fernandina, Fla., to and via. *See* Fernandina Harbor.
- Ferry (Caddo) Lake, Tex. and La., via. *See* Cypress Bayou.
- Fish ways or ladders. *See* Fishways.
- Fivemile Creek, Ala., to Black Warrior River. *See* Black Warrior River.
- Fivemile (The Dalles) rapids, Columbia River. *See* Columbia River.
- Florida, State of, across. *See* Florida.

Canals and waterways—Continued.

Flushing Bay, N. Y., to Newtown Creek. *See* Flushing Bay.

Forest reserves, rights of way for mining, etc., purposes. *See* Forest reserves.

Fox River, Wis., to Rock River. *See* Fox River.

Fox River, Wis., to Wisconsin River. *See* Fox and Wisconsin rivers.

Fox River, Wis., transportation route to the seaboard, via. *See* Fox River.

Franklin, La., to Mermentau River. *See* Franklin.

Franklin, Va., to Cape Charles. *See* Franklin.

Fulton, Ark., to Shreveport, La. *See* Fulton.

Galveston, Tex., to Brazos River. *See* Galveston Bay and Harbor.

Galveston and Brazos Canal, Tex. *See* Galveston and Brazos Canal.

Galveston Bay, Tex., to Sabine Lake. *See* Galveston Bay and Harbor.

Gordon Lake, Del., via. *See* Rehoboth Bay.

Gowanus Canal, N. Y. *See* Gowanus Bay, Canal, and Creek.

Grande, Rio, Tex., to Donaldsonville, La. *See* Rio Grande River.

Grand Lake, La., to Bayou Teche. *See* Charenton Canal.

Grand Pass, La., to New Orleans. *See* Baratania Bay and Baratania Ship Canal.

Grant River, or Slue, Wis. (Potosi Canal). *See* Grant River.

Grass River, N. Y., canal to St. Lawrence River. *See* Grass River.

Grassy Sound, N. J., Cape May to Great Bay, via. *See* Cape May.

Grays Harbor, Wash., to Puget Sound. *See* Grays Harbor.

Great Bay, N. J., Barnegat Bay to Great Egg Bay, via. *See* Barnegat Bay, Harbor, and Inlet.

Great Bay, N. J., to Cape May, waterway. *See* Great Bay.

Great Egg Bay, N. J., Cape May to Great Bay, via. *See* Cape May.

Great Egg Bay, N. J., to Barnegat Bay. *See* Great Egg Bay.

Great Kanawha River, W. Va., to James River, Va. *See* James River and Kanawha Canal.

Great Lakes. *See* Northern and Northwestern Lakes and each particular lake.

Green Bay, Wis., to Lake Michigan. *See* Sturgeon Bay and Lake Michigan Canal.

Green Bay and Mississippi Canal, Wis. *See* Fox and Wisconsin rivers.

Gulf of Mexico, to and along. *See* Mexico, Gulf of.

Guntersville, Ala., to Black Warrior River. *See* Tennessee River.

Halifax River, Fla., to Indian River. *See* Halifax River and Haulover Canal.

Harlowe Creek, N. C., to Clubfoot Creek. Norfolk Harbor waterways.

Haulover Canal, Fla. *See* Haulover Canal.

Hennepin Canal, Ill. *See* Illinois and Mississippi Canal.

Hiwassee River, Tenn., Tennessee River to Savannah River, via. *See* Hiwassee River.

Hudson River, N. Y., to Great Lakes. *See* Hudson River.

Illinois and Michigan Canal, Ill. *See* Illinois and Michigan Canal.

Illinois and Mississippi Canal, Ill. *See* Illinois and Mississippi Canal.

Illinois River, Ill., Mississippi River to Michigan Lake, via. *See* Illinois and Michigan Canal, Illinois River, and Michigan Lake, under Mississippi River.

Illinois River, Ill., to Lake Michigan. *See* Illinois and Michigan Canal and Illinois River.

Illinois, State of, proceeds of sales of lands to be applied to construction of. *See* Illinois State.

Indefinite, permanent, appropriations for operating and care. *See* Appropriations.

Indiana, State of, proceeds of sales of lands to be applied to construction of. *See* Indiana State.

Indian River, Del., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.

Canals and waterways—Continued.

- Indian River, Del., to Isle of Wight and Sinepuxent bays. *See* Indian River.
- Indian River, Del., to Pocomoke River, Md. *See* Indian River.
- Indian River, Fla., to Halifax River. *See* Haulover Canal and Indian River.
- Indian River, Fla., to Mosquito Lagoon. *See* Haulover Canal.
- Indian River Bay, Del., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Indian River Bay, Del., to Isle of Wight and Sinepuxent bays. *See* Indian River.
- Interoceanic, across isthmus of Panama. *See* Panama.
- Isle of Wight Bay, Md., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Isle of Wight Bay, Md., to Sinepuxent Bay and Indian River. *See* Isle of Wight Bay.
- Isthmian, to connect Atlantic and Pacific oceans. *See* Panama.
- Isthmus of Panama. *See* Panama.
- Jamaica Bay, N. Y. *See* Jamaica Bay.
- James River, Va., transportation route to seaboard, via. *See* James River.
- James River and Kanawha Canal. *See* James River and Kanawha Canal.
- Jarvis Sound, N. J., Cape May to Great Bay, via. *See* Cape May.
- Jefferson, Tex., to Shreveport, La. *See* Cypress Bayou.
- Jekyl Creek, Ga., via. *See* Savannah-Fernandina waterway.
- Jenkins Sound, N. J., Cape May to Great Bay, via. *See* Cape May.
- Kalamazoo-Clinton Canal, Mich. *See* Kalamazoo-Clinton Canal.
- Kanawha River, W. Va., to James River, Va. *See* James River and Kanawha Canal.
- Kanawha River, W. Va., transportation route to seaboard, via. *See* Kanawha River.
- Kansas, State of, certain proceeds of sales of lands to be applied to internal improvements. *See* Kansas State.
- Kelley Bayou, La., waterway from Shreveport to Fulton, via. *See* Shreveport.
- Keokuk (Des Moines Rapids) Canal, Mississippi River. *See* Des Moines Rapids, under Mississippi River.
- Keweenaw Bay to Lake Superior, Mich. *See* Keweenaw Bay-Lake Superior waterway.
- Kissimmee Lake and River, Fla., via. *See* Florida State, canal across, and Tohopekaliga Lake.
- Lac La Belle Canal, Mich. *See* Lac La Belle Harbor.
- Ladders, fish. *See* Fishways.
- Lake Drummond Canal. *See* Dismal Swamp Canal.
- Lake Erie and Ohio River Ship Canal. *See* Erie Lake, *supra*, and Lake Erie and Ohio River Ship Canal.
- Lakes Bay, N. J., Barnegat Bay to Great Egg Bay, via. *See* Barnegat Bay, Harbor, and Inlet.
- Lakes Bay, N. J., Cape May to Great Bay, via. *See* Cape May.
- Lakes, Great, to the seaboard. *See* Northern and Northwestern Lakes and each particular lake.
- Lake Superior Ship Canal, Railway and Iron Company Canal, Mich. *See* Keweenaw Bay-Lake Superior waterway.
- Lake Washington Canal, Wash. *See* Puget Sound.
- Leamings Sound, N. J., Cape May to Great Bay, via. *See* Cape May.
- Lewes, Del., to Chincoteague Bay. *See* Delaware Bay and River.
- Lewes, Del., to Rehoboth Bay. *See* Delaware Bay and River.
- Linkhorn Bay, Va., Lynnhaven Bay to Elizabeth River, via. *See* Lynnhaven Bay.
- Little Assawaman Bay, Del., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Little Assawaman Bay, Del., Indian River to Isle of Wight and Sinepuxent bays, via. *See* Indian River.
- Little Egg Harbor Bay, N. J., Barnegat Bay to Great Egg Bay, via. *See* Barnegat Bay, Harbor, and Inlet.

Canals and waterways—Continued.

- Little Mud River, Ga., via. *See* Savannah-Fernandina waterway.
- Little Muscle Shoals Canal, Ala. *See* Muscle Shoals Canal, etc., under Tennessee River.
- Little River, Del., to St. Jones River. *See* Little River.
- Locks, levying of operating charges. *See* Tolls.
- Locks, operating and care, permanent indefinite appropriations. *See* Appropriations.
- Louisiana, State of, proceeds of sales of land to be applied to construction of. *See* Louisiana State.
- Louisville and Portland Canal, Ky. *See* Falls at Louisville, etc., under Ohio River.
- Ludlam Bay, N. J., Cape May to Great Bay, via. *See* Cape May.
- Lynnhaven Bay, Va., to Elizabeth River. *See* Lynnhaven Bay.
- McClellanville, S. C., waterway from Santee River, and to and opposite, to Bulls Bay and Charleston. *See* McClellanville.
- Maintenance, care, etc., charges, levying of. *See* Tolls.
- Maintenance, care, etc., permanent indefinite appropriations. *See* Appropriations.
- Massena, N. Y., canal to St. Lawrence River. *See* Grass River.
- May, Cape, N. J., to Great Bay, waterway. *See* Cape May.
- Mermentau River, La., to Franklin. *See* Mermentau River.
- Mexico, Gulf of, to and along. *See* Mexico, Gulf of.
- Mexico, Republic of, to Texas and Mississippi River. *See* Black Bayou (tributary of Bayou Boeuf), Rio Grande River, and Terrebonne Bayou.
- Miami and Erie Canal, Ohio. *See* Miami and Erie Canal.
- Miami Extension Canal, Ohio. *See* Miami and Erie Canal.
- Michigan Lake to Calumet River, Ind., via Berry Lake. *See* Michigan Lake.
- Michigan Lake to Illinois River. *See* Illinois and Michigan Canal and Illinois River.
- Michigan Lake to Mississippi River. *See* Des Plaines, Fox, Illinois, Rock, and Wisconsin rivers, and Illinois and Michigan, Illinois and Mississippi, and Milwaukee and Rock River canals.
- Michigan Lake to Rock River, Wis. *See* Milwaukee and Rock River Canal.
- Michigan Lake to Sturgeon Bay, Wis. *See* Sturgeon Bay and Lake Michigan Canal.
- Michigan Lake to Wabash River, Ind. *See* Michigan Lake.
- Michigan, State of, proceeds of sales of lands to be applied to construction of. *See* Michigan State.
- Milwaukee and Rock River Canal, Wis. *See* Milwaukee and Rock River Canal.
- Minim Creek—Estherville Canal, S. C. *See* Santee River.
- Minnesota, State of, certain proceeds of sales of lands to be applied to internal improvements. *See* Minnesota State.
- Mispillion River, Del., to Broadkill Creek, or River. *See* Mispillion River.
- Mississippi River, Des Moines rapids. *See* Des Moines rapids, under Mississippi River.
- Mississippi River, Rock Island rapids. *See* Rock Islands rapids, under Mississippi River.
- Mississippi River to Berwick Bay, La., Texas, and Mexico. *See* Black Bayou (tributary of Bayou Boeuf), Rio Grande River, and Terrebonne Bayou.
- Mississippi River to Cedar River, Iowa. *See* Cedar River.
- Mississippi River to Chicago, Ill., via Illinois and Des Plaines river, etc. *See* Michigan Lake, under Mississippi River.
- Mississippi River to Green Bay, Wis. *See* Fox and Wisconsin rivers.
- Mississippi River to the Gulf (Grand Pass), via Barataria Bay, La. *See* Barataria Bay.
- Mississippi River to the Gulf, via Barataria Ship Canal, La. *See* Barataria Ship Canal.
- Mississippi River to Illinois River, Ill. *See* Illinois and Mississippi Canal.

Canals and waterways—Continued.

- Mississippi River to Lake Michigan. *See* Michigan Lake, under Mississippi River.
- Mississippi River to Lake Pontchartrain (Carondelet Canal), La. *See* Carondelet Canal.
- Mississippi River to Lake Superior. *See* Superior Lake.
- Mississippi River to Red Cedar River, Iowa. *See* Cedar River.
- Mississippi River. (at Donaldsonville, La.) to Rio Grande River, Tex. *See* Mississippi River.
- Mississippi River, transportation routes to seaboard. *See* Mississippi River.
- Mississippi, State of, proceeds of sales of lands to be applied to construction of. *See* Mississippi State.
- Mississippi-Alabama State line to Chattahoochee River, opposite West Point, Ga., internal improvement. *See* Mississippi State.
- Missouri, State of, proceeds of sales of lands to be applied to construction of. *See* Missouri State.
- Mobile Bay, Ala., to Pensacola Bay. *See* Bon Secours Bay to Pensacola Bay.
- Mobile Bay, Ala., to Tennessee River, internal improvement. *See* Mobile Bay, etc.
- Moccasin bend, Tennessee River. *See* Tennessee River.
- Monongahela River, W. Va., transportation route to seaboard. *See* Monongahela River.
- Morgan Cut and Canal, Tex. *See* Galveston Bay and Harbor.
- Mormon Channel, or Slough, Cal., to Calaveras River. *See* San Joaquin River.
- Moscow, Iowa, to Bloomington (Muscatine). *See* Cedar River.
- Mosquito Creek, S. C., canal from Santee River, through. *See* Santee River.
- Mosquito Creek, S. C., waterway from Charleston to Beaufort, via. *See* Charleston Harbor.
- Mosquito Lagoon, Fla., to Indian River. *See* Haulover Canal.
- Mud River, Ga., from Savannah, Ga., to Fernandina, Fla., via. *See* Savannah Harbor and River.
- Mud River, Ga., from Doboy to Sapelo, via. *See* Doboy Sound.
- Muscatine (Bloomington), Iowa, to Cedar River. *See* Cedar River.
- Muscle Shoals Canal, Ala. *See* Tennessee River.
- Nassau Inlet, River, and Sound, Fla., via. *See* Nassau Inlet, River, and Sound.
- Neuse River, N. C., to Beaufort, N. C. *See* Newbern.
- Neuse River, N. C., to Cape Fear River. *See* Neuse River.
- Newark Bay, N. J., to New York Harbor, across Bergen Neck. *See* Newark Bay.
- Newbern, N. C., to Beaufort, N. C. *See* Newbern.
- Newbern and Beaufort (Clubfoot and Harlowe) Canal, N. C. *See* Clubfoot and Harlowe Canal.
- New Canal, Lake Pontchartrain, La. *See* Pontchartrain Lake.
- New Orleans, La., to the Gulf (Grand Pass), via Barataria Bay, etc. *See* Barataria Bay.
- New Orleans, La., to the Gulf, via Barataria Ship Canal. *See* Barataria Ship Canal.
- New Orleans, La., to Lake Pontchartrain (Carondelet Canal). *See* Carondelet Canal.
- Newport River, N. C., via. *See* Beaufort Harbor.
- New River, N. C., via, etc. *See* New River.
- Newtown Creek, N. Y., to Flushing Bay. *See* Newtown Creek.
- New York Harbor, N. Y., to Newark Bay, across Bergen Neck. *See* New York Bay and Harbor.
- New York State canals. *See* Erie Canal Basin, under Buffalo Harbor, and New York State.
- Niagara Falls, Niagara River, N. Y. *See* Niagara River.
- Niagara River, N. Y., to Lake Ontario, around Niagara Falls. *See* Niagara River.
- Nicaraguan Canal. *See* Nicaraguan Canal.

Canals and waterways—Continued.

- Norfolk, Va., Eastern Branch, Elizabeth River, to Lynnhaven Bay. *See* Elizabeth River.
- Norfolk, Va., to sounds of North Carolina and southward. *See* Norfolk Harbor waterways.
- North Carolina Cut, N. C. *See* North Carolina Cut.
- Northern and Northwestern Lakes. *See* Northern and Northwestern Lakes and each particular lake.
- Ohio River, Chesapeake and Ohio Canal. *See* Chesapeake and Ohio Canal.
- Ohio River, Louisville and Portland Canal, Ky. *See* Falls at Louisville, etc., under Ohio River.
- Ohio River to Chesapeake and Ohio Canal. *See* Chesapeake and Ohio Canal.
- Ohio River to Cumberland, Md. *See* Chesapeake and Ohio Canal.
- Ohio River, near Pittsburg, Pa., to Lake Erie. *See* Lake Erie and Ohio River Ship Canal.
- Ohio River to Lake Michigan, via Wabash River. *See* Michigan Lake.
- Ohio River to Potomac River, D. C. *See* Chesapeake and Ohio Canal.
- Ohio River to Toledo, Ohio. *See* Miami and Erie Canal.
- Ohio River, transportation routes to seaboard. *See* Ohio River.
- Ohio, State of, proceeds of sales of lands to be applied to construction of. *See* Ohio State.
- Old Canal, Lake Pontchartrain, La. *See* Pontchartrain Lake.
- Ontario Lake to Lake Erie. *See* Ontario Lake.
- Operating and care, etc., charges, levying of. *See* Tolls.
- Operating and care, permanent indefinite appropriations. *See* Appropriations.
- Oregon, State of, certain proceeds of sales of lands to be applied to internal improvements. *See* Oregon State.
- Owendaw River, S. C., via. *See* Charleston Harbor.
- Pacific Ocean to the Atlantic. *See* Pacific coast.
- Pamlico River, N. C., to Bay River. *See* Pamlico River.
- Pamlico Sound, N. C., to and by way of. *See* Norfolk Harbor waterways and Pamlico Sound.
- Panama, isthmus of. *See* Panama.
- Peace Creek, Fla., to St. Johns River. *See* Peace Creek.
- Pecks Bay, N. J., Cape May to Great Bay, via. *See* Cape May.
- Peconic Bay, N. Y., to Jamaica Bay. *See* Peconic Bay.
- Pensacola Bay, Fla., to Bon Secours Bay. *See* Pensacola Bay.
- Pensacola Bay, Fla., to Mobile Bay. *See* Pensacola Bay.
- Permanent indefinite appropriations for operating and care. *See* Appropriations.
- Pittsburg, Pa., to Lake Erie. *See* Lake Erie and Ohio River Ship Canal.
- Pittsburg, Pa., to Potomac River, Cumberland, Md., and Chesapeake and Ohio Canal. *See* Chesapeake and Ohio Canal.
- Plantation Creek, Ga., via. *See* Plantation Creek.
- Pocomoke River, Md., to Indian River, Del. *See* Pocomoke River.
- Pocomoke River, Md., to Sinepuxent Bay. *See* Pocomoke River.
- Pontchartrain Lake, La., to Mississippi River (Carondelet Canal). *See* Carondelet Canal.
- Portage Canal, Fox and Wisconsin rivers, Wis. *See* Fox and Wisconsin rivers.
- Portage Lake and Lake Superior canals, Mich. *See* Keweenaw Bay-Lake Superior waterway.
- Portage Lake and River Improvement Company Canal, Mich. *See* Keweenaw Bay-Lake Superior waterway.
- Portage River, Houghton County, Mich., via. *See* Keweenaw Bay-Lake Superior waterway.
- Port Arthur Canal, Tex. *See* Port Arthur Canal and Sabine River.
- Portland, Ky., to Louisville. *See* Falls at Louisville, etc., under Ohio River.
- Portland Canal, Alaska. *See* Portland Canal.
- Port Royal (Beaufort) River, S. C. *See* Beaufort Harbor and River.

Canals and waterways—Continued.

- Potomac River, D. C., to Cumberland, Md., and Ohio River. *See* Chesapeake and Ohio Canal.
- Potosi Canal, Wis. *See* Potosi.
- Primehook Creek, Del., via. *See* Primehook Creek.
- Puget Sound, Wash., to Grays Harbor. *See* Puget Sound.
- Puget Sound, Wash., to Lakes Union, Washington, and Samamish, *See* Puget Sound.
- Puget Sound Canal, Wash. *See* Waterway to Lake Union, etc., under Puget Sound.
- Rafts, sunken. *See* Wrecks.
- Red Bayou, La., waterway from Shreveport to Fulton, via. *See* Shreveport.
- Red Cedar River, Iowa, to Mississippi River. *See* Red Cedar River.
- Regulations for use, administration, and navigation of. *See* Regulations and rules.
- Rehoboth Bay, Del., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Rehoboth Bay, Del., to Delaware Bay. *See* Rehoboth Bay.
- Richardsons Sound, N. J., Cape May to Great Bay, via. *See* Cape May.
- Rights of way in forest reserves for mining, etc., purposes. *See* Forest reserves.
- Rio Grande River, Tex., to Donaldsonville, La. *See* Rio Grande River.
- Rockaway Inlet, N. Y., to. *See* Rockaway Inlet.
- Rock Island, Ill., to Hennepin. *See* Illinois and Mississippi Canal.
- Rock Island rapids, Mississippi River. *See* Mississippi River.
- Rock River, Ill., to connect Illinois and Mississippi rivers. *See* Illinois and Mississippi Canal.
- Rock River, Wis., to Lake Winnebago, Fox River. *See* Rock River.
- Rock River, Wis., to Milwaukee. *See* Milwaukee and Rock River Canal.
- Romerly Marsh, Ga., via. *See* Savannah-Fernandina waterway.
- Routes, transportation, to the seaboard. *See* Transportation routes.
- Sabine Lake, Tex., to Calcasieu Lake and River, La. *See* Sabine Lake.
- Sabine Lake and Pass, Tex., to Calcasieu Lake and River, La. *See* Sabine Pass Harbor.
- Sabine Lake, Tex., to Galveston Bay. *See* Sabine Lake.
- Sabine Pass, Tex., to Taylors Bayou. *See* Port Arthur Canal, under Sabine River.
- St. Andrews Bay, Fla., to Chattahoochee River. *See* St. Andrews Bay.
- St. Andrews Bay, Fla., to Choctawhatchee Bay and River. *See* St. Andrews Bay.
- St. Clair Flats Canal, Mich. *See* St. Clair Flats Canal.
- St. Clair River, Mich. *See* St. Clair Flats Canal.
- St. Francis River, Mo., Cut-off Canal. *See* St. Francis River.
- St. John Bayou, La., to Mississippi River and Lake Pontchartrain (Carondelet Canal). *See* Carondelet Canal.
- St. Johns River, Fla., to Charlotte Harbor or Peace Creek. *See* St. Johns River.
- St. Johns River, Fla., to Fernandina. *See* St. Johns River.
- St. Johns River, Fla., to Gulf of Mexico. *See* St. Johns River.
- St. Johns River, Fla., to Nassau Inlet, or Sound. *See* St. Johns River.
- St. Johns River, Fla., to St. Marys Harbor and River. *See* St. Johns River.
- St. Johns River, Fla., to Vassasousa (Waccasassa) Bay, via. *See* St. Johns River.
- St. Jones River, Del., to Little River. *See* St. Jones River.
- St. Lawrence Power Co.'s canal, St. Lawrence River to Grass River, N. Y. *See* St. Lawrence River.
- St. Lawrence River, N. Y., at Waddington. *See* St. Lawrence River.

Canals and waterways—Continued.

- St. Lawrence River, N. Y., to Grass River. *See* St. Lawrence River.
- St. Marys Falls Canal, Mich. *See* St. Marys River.
- St. Marys Harbor and River, Fla. and Ga., to St. Johns River. *See* St. Marys Harbor and River.
- St. Marys River, Fla. and Ga., to Apalachicola River and Bay. *See* St. Marys Harbor and River.
- St. Marys River, Fla. and Ga., to Gulf of Mexico. *See* St. Marys Harbor and River.
- St. Marys River, Fla. and Ga., to St. Johns River. *See* St. Marys Harbor and River.
- St. Marys River, Fla. and Ga., to Vassasousa (Waccasassa) Bay, via St. Johns River. *See* St. Marys Harbor and River.
- St. Marys River, Mich. *See* St. Marys River.
- Sale and Murphy Canal, La., closure of outlet from Red River. *See* Red River.
- Salmon Bay, Wash., via. *See* Salmon Bay, and Waterway to Lake Washington, etc., under Puget Sound.
- Samamish Lake, Wash., to Puget Sound. *See* Puget Sound.
- Sanitary District canal, Chicago, Ill. *See* Sanitary District of Chicago.
- San Joaquin River, Cal., to Calaveras River. *See* San Joaquin River.
- Santee Canal, S. C. *See* Santee Canal.
- Santee River, S. C., to and opposite McClellanville, to Bulls Bay and Charleston. *See* Charleston Harbor.
- Santee River, S. C., to Cooper River. *See* Santee Canal.
- Sapelo Sound, Ga., to and via. *See* Sapelo Sound.
- Sault Ste. Marie Canal, Mich. *See* St. Marys River.
- Savannah Harbor and River, Ga., to and via. *See* Savannah Harbor and River.
- Seaboard, transportation routes to the. *See* Transportation routes.
- Seattle Canal, Wash. *See* Waterway to Lake Union, etc., under Puget Sound.
- Shilshole Bay, Wash., via. *See* Waterway to Lake Union, etc., under Puget Sound.
- Shoalwater Bay (Willapa Harbor), Wash., to Columbia River. *See* Willapa Bay, Harbor, and River.
- Shreveport, La., waterway to Fulton, Ark., via Cypress Bayou, etc. *See* Shreveport.
- Shreveport, La., waterway to Jefferson, Tex., via Cypress Bayou, etc. *See* Cypress Bayou.
- Sinepuxent Bay, Md., Chincoteague Bay to Delaware Bay, via. *See* Chincoteague Bay and Inlet.
- Sinepuxent Bay, Md., to Isle of Wight Bay and Indian River. *See* Sinepuxent Bay.
- Sinepuxent Bay, Md., to Pocomoke River. *See* Sinepuxent Bay.
- Slack-water systems, levying of tolls. *See* Tolls.
- Slack-water systems, operating and care, permanent indefinite appropriations. *See* Appropriations.
- Slaughter Creek, Del., via. *See* Slaughter Creek.
- Smiths Cove, Wash., via. *See* Waterway to Lake Union, etc., under Puget Sound.
- Soda Lakes, La., waterway from Shreveport, La., to Fulton, Ark., via. *See* Shreveport.
- Soda Lakes, La., waterway from Shreveport, La., to Jefferson, Tex., via. *See* Cypress Bayou.
- Sodo (Soda) Lakes, La. *See* Soda Lakes, *supra*.
- Soo Canal, Mich. *See* St. Marys River.
- South Branch, Chicago River, Ill., to Illinois River. *See* Illinois and Michigan Canal and Sanitary District of Chicago.
- States admitted into the Union after 1841, proceeds of sales of lands to be applied to construction of. *See* States.
- Steamers, sunken. *See* Wrecks.
- Stiles Sound, N. J., Cape May to Great Bay, via. *See* Cape May.
- Sturgeon Bay and Lake Michigan Canal, Wis. *See* Sturgeon Bay and Lake Michigan Canal.

Canals and waterways—Continued.

Sunken craft, removal of. *See* Wrecks.

Superior Lake to Keweenaw Bay, Mich. *See* Keweenaw Bay-Lake Superior waterway.

Superior Lake to Lac La Belle, Mich. *See* Lac La Belle Harbor.

Superior Lake to Mississippi River. *See* Superior Lake.

Surveys. *See* Examinations and surveys.

Suwanee River, Fla., to Cedar Keys Harbor. *See* Suwanee River.

Suwanee Sound, Fla., via. *See* Suwanee River.

Swan Quarter Bay, N. C., to Deep Bay. *See* Swan Quarter Bay.

Swansboro, N. C., waterways to. *See* Swansboro.

Synepuxent (Sinepuxent) Bay, Md. *See* Sinepuxent Bay, *supra*.

Tampa, Fla., to Clearwater Harbor and Cedar Keys. *See* Tampa Bay and Harbor.

Tailors Bayou, Tex., to Sabine Pass. *See* Port Arthur Canal, under Sabine River.

Teche Bayou, La., to Grand Lake. *See* Charenton Canal.

Teche Bayou, La., to Mermentau River. *See* Franklin.

Tennessee River, Moccasin bend. *See* Tennessee River.

Tennessee River to Black Warrior River, Ala. *See* Tennessee River.

Tennessee River to Coosa River. *See* Tennessee River.

Tennessee River to Mobile Bay, Ala., internal improvement. *See* Tennessee River.

Tennessee River to Savannah River, via Hiwassee River. *See* Tennessee River.

Tennessee River to Tombigbee River. • *See* Tennessee River.

Tennessee River, transportation route to seaboard, via. *See* Tennessee River.

Texas, State of, to Mexico, Berwick Bay, and Mississippi River. *See* Black Bayou (tributary of Bayou Bœuf, Rio Grande River, and Terrebonne Bayou).

Texas, State of, Rio Grande River to Donaldsonville, La. *See* Rio Grande River.

The Dalles (Fivemile) rapids, Columbia River. *See* Columbia River.

Threemile (Cornells) Creek, N. Y., to Jamaica Bay. *See* Cornells Creek and Landing.

Tohopekaliga Lake, Fla., via. *See* Florida State, canal across, and Tohopekaliga Lake.

Toledo, Ohio, to Cincinnati. *See* Miami and Erie Canal.

Tolls. *See* Tolls.

Tombigbee River to Tennessee River. *See* Tombigbee River.

Tonnage, etc., charges, levying of. *See* Tolls.

Topokalija (Tohopekaliga) Lake, Fla., via. *See* Florida State, canal across, and Tohopekaliga Lake.

Town Creek, S. C. (branch of McClellanville Creek), via. *See* McClellanville.

Townsend Sound, N. J., Cape May to Great Bay, via. *See* Cape May.

Transportation routes to the seaboard. *See* Transportation routes.

Turners Cut, N. C. *See* Turners Cut.

Twelvemile Bayou, La., to and via. *See* Cypress and Twelvemile bayous.

Union Lake, Wash., via. *See* Puget Sound.

Valley River, Ala., waterway via. *See* Black Warrior River.

Vassalousa (Waccasassa) Bay, Fla., to St. Marys River, via St. Johns River. *See* Waccasassa Bay.

Wabash and Erie Canal. *See* Wabash and Erie Canal.

Wabash River, Ill., hydraulic canal at Mount Carmel. *See* Wabash River.

Wabash River, Ind., to Lake Michigan. *See* Wabash River.

Waccamaw River, N. C., to Cape Fear River. *See* Waccamaw River.

Waccasassa (Vassalousa) Bay, Fla., to St. Marys River, via St. Johns River. *See* Waccasassa Bay.

Waddington, N. Y., around rapids of St. Lawrence River. *See* Waddington Harbor.

	Page.
Canals and waterways—Continued.	
Wando River, S. C., via. <i>See</i> Charleston Harbor.	
Wappoo Cut, S. C. <i>See</i> Wappoo Cut.	
Warrior River, Ala. <i>See</i> Black Warrior River.	
Washington, D. C., to Cumberland, Md. <i>See</i> Chesapeake and Ohio Canal.	
Washington Lake, Wash., via. <i>See</i> Puget Sound.	
Water craft, sunken. <i>See</i> Wrecks.	
West Galveston Bay, Tex., to Brazos River. <i>See</i> West Galveston Bay.	
West Point, Ga., to Alabama State line, toward Jackson, Miss., internal improvement. <i>See</i> West Point.	
Willamette Falls Canal, Oreg. <i>See</i> Willamette River.	
Willapa Harbor (Shoalwater Bay), Wash., to Columbia River. <i>See</i> Willapa Bay, Harbor, and River.	
Wilmington, N. C., to Norfolk, Va. <i>See</i> Cape Fear River.	
Winnebago Lake, Fox River, Wis., to Rock River. <i>See</i> Fox River.	
Winyah Bay, S. C., to and via. <i>See</i> Winyah Bay.	
Wisconsin River, Wis., to Fox River. <i>See</i> Fox and Wisconsin rivers.	
Wisconsin River, Wis., transportation route to seaboard. <i>See</i> Wisconsin River.	
Wrecks, removal of. <i>See</i> Wrecks.	
Youghiogheny River, Pa., to Chesapeake and Ohio Canal. <i>See</i> Youghiogheny River.	
Canapitsit Channel, Mass.:	
Examination and survey-----	590
Improvement-----	613, 679
Canarsie Bay, N. Y.:	
Examination and survey-----	278
Improvement ----	315, 350, 361, 397, 437, 486, 548, 614, 680, 747, 954, 1084, 1224
Canaveral Harbor, Fla., examinations and surveys-----	643, 721
Cane River (arm of Red River), La.:	
Declared not navigable; repeal-----	1123, 1191
Examinations and surveys-----	389, 589
Improvement-----	406
Caney Creek, Tex., examinations and surveys-----	527, 900
Caney Fork River, Tenn.:	
Examinations and surveys-----	278, 299, 423
Improvement-----	321, 345, 374, 407, 453, 505, 570, 1247
Cannasanier Lake, La., examination and survey-----	279
Cannon River, Minn.:	
Examination and survey-----	156
Reservoirs at headwaters, examinations and surveys-----	354, 387
Canoochee River, Ga., examination and survey-----	326
Cape Ann, Sandy Bay, Mass. <i>See</i> Sandy Bay.	
Cape Canaveral Harbor, Fla. <i>See</i> Canaveral Harbor.	
Cape Charles, Va., waterway to Franklin, examination-----	720
Cape Charles City Harbor, Va.:	
Examination and survey, including approaches by Cherrystone Inlet-----	528
Improvement, including approaches by Cherrystone Inlet-----	551, 616
	751, 850, 957, 1089, 1231
Cape Cod, Mass., examination of east shore for harbor of refuge-----	953
Cape Cod Canal, Mass., entrances at Buzzards and Barnstable bays, examinations and surveys-----	353, 794
Cape Cod Harbor, Mass. <i>See</i> Provincetown Harbor.	
Cape Fear River, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Fayetteville, above, examinations and surveys-----	388, 723
Federal Point to junction of Haw and Deep rivers, examination and survey-----	196
Mouth, examination and survey-----	186
Northeast Branch. <i>See</i> Northeast River.	
Waterway to Neuse River, examination and survey-----	245
Waterway to Norfolk, Va., examinations and surveys-----	245, 281
Waterway to Waccamaw River, examination and survey-----	354

Cape Fear River, N. C.—Continued.	Page.
Wilmington, above, examination relative to modification of existing project (Wilmington to Fayetteville).....	1234
Wilmington, above, improvement.....	342,
370, 404, 447, 448, 499, 564, 627, 693, 769, 866, 978 ² , 1091, 1233	917
Wilmington, at, examination and survey.....	48, 53, 57, 59, 64, 67, 72, 74, 81, 86,
Wilmington, at and below, improvement....	112, 123, 127, 184, 193, 206, 216, 231, 241, 257, 267, 286, 313, 342, 370,
404, 447, 448, 499, 564, 627, 693, 769, 866, 978, 1091, 1201, 1234, 1293	35
Wilmington, below, examination and survey.....	325, 917
Wilmington to Fayetteville, examinations and surveys.....	342
Wilmington to Fayetteville, extinguishment of private right to charge toll.....	525, 1091
Wilmington to the ocean, examinations and surveys.....	
Cape Florida Entrance, Biscayne Bay, Fla. <i>See</i> Biscayne Bay.	
Cape Foulweather, Oreg. <i>See</i> Foulweather, Cape.	
Cape Girardeau, Mo. <i>See</i> Mississippi River.	
Cape Jellison, Me. <i>See</i> Penobscot Bay.	
Cape Lookout, N. C. <i>See</i> Lookout, Cape.	
Cape Lookout, Oreg. <i>See</i> Lookout, Cape.	
Cape May, N. J.:	
Cape May City, examination and survey of breakwater.....	593
Cold Spring Inlet and inner harbor thereat. <i>See</i> Cold Spring Inlet.	
Thoroughfare, etc., to Great Bay, examinations and surveys.....	467, 593
Cape May Real Estate Company, regulation of wharfage charges of, at harbor inside of Cold Spring Inlet, N. J.....	1227, 1228
Cape Porpoise Harbor, Me.:	
Examinations and surveys.....	716, 836, 1128
Improvement.....	844, 923, 1220
Cape Small Harbor, Me., examination and survey.....	1015
Cape Vincent Harbor, N. Y.:	
Examination and survey.....	524
Improvement.....	750, 849, 954, 1086
Capistrano, Point, Cal. <i>See</i> Deep-water harbor, under Pacific coast.	
Capital City Improvement Company, dam of.....	1147
Capon Creek (Great Cacapon River), W. Va., examination and survey.....	528
Care and maintenance of rivers and harbors. <i>See</i> Arrearages, Examinations and surveys, and Preservation and repairs.	
Carlin Bayou, La., examination and survey.....	419
Carlls River, N. Y., examination.....	718
Carondelet Canal, La., survey and improvement.....	20
Carp River, Mich., examination and survey.....	466
Carquinez Strait, Cal.:	
<i>See also</i> San Pablo and Suisun bays.	
Examination and survey.....	444
Examination and survey of San Joaquin River and Stockton Channel from San Francisco Bay to Stockton.....	1272
Carrabelle Harbor and River, Fla.:	
Dog Island Harbor, examination and survey.....	354
East Pass, examination and survey.....	894
Harbor and bar, examinations and surveys.....	715, 914, 1126
Improvement, including East Pass and St. George Sound.....	439,
753, 851, 959, 1093, 1237	354
River, examination and survey.....	
Carrollton, La. <i>See</i> Mississippi River.	
Carrollton and Lock Number One Turnpike Road Company.....	430
Carrot Island Slough, N. C., examination and survey of Lewis Thoroughfare, and thence to and including.....	1018
Carrs Island, Rock River, Ill. <i>See</i> Rock River.	
Carters Creek, Va.:	
Examination and survey.....	901
Improvement.....	977, 1089, 1231
Caruthersville Harbor, Mo. <i>See</i> Mississippi River.	
Carvers Harbor, Vinalhaven, Me.:	
Examinations and surveys.....	645 ² , 722
Improvement.....	744, 844, 950

Cascade Locks, Oreg. <i>See</i> Columbia River.	Page.
Cascades Canal, Columbia River, Oreg. <i>See</i> Columbia River.	
Cases Inlet, Wash., channel from North Bay to Hood Canal, examination	720
Caseville Harbor, Mich.:	
<i>See also</i> Pigeon River.	
Examinations and surveys	354, 385, 1128
Caseys Pass, Fla. <i>See</i> Sarasota Bay.	
Cashai (Cashie) River, N. C. <i>See</i> Cashie River.	
Cashie River, N. C., examinations and surveys	422, 795
Cassidy Bayou, Miss., examinations and surveys	421, 467, 646
Cassity (Cassidy) Bayou, Miss. <i>See</i> Cassidy Bayou.	
Castor Bayou, La., examinations and surveys	589, 716
Catawba River, N. C. and S. C.:	
Examinations and surveys	244, 300, 467
Examination and survey from Wateree River to falls of (under Wateree River)	594
Cat Creek, Va., waterway from Franklin to Cape Charles, via. <i>See</i> Franklin.	
Catfish River, Wis., survey (under Rock River)	88
Cathance River, Me.:	
Examination and survey	298
Improvement	308, 338, 366
Cathlamet, Wash. <i>See</i> Columbia River.	
Cat River, Va., examination and survey	1280
Catskill Creek, N. Y., examinations and surveys	795, 1017
Cattaraugus Creek Harbor, N. Y., improvement	77, 80, 85
Causeways. <i>See</i> Structures.	
Cavallo Pass (entrance to Matagorda Bay), Tex.:	
Channel from Gulf of Mexico to Alligator Head, via, examination and survey	900
Channel to Port Lavaca, examination and survey	1270
Examination and survey	219
Harbor at, survey	123
Improvement	257, 268, 288, 315, 344, 363, 399, 440
Port O'Connor to, examination and survey for harbor	1279
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Waterway to Aransas Pass, including channel to Victoria, on Guadalupe River, improvement	1244
Cedar Bayou (tributary of Galveston Bay), Tex.:	
Examinations and surveys	234, 468, 527
Improvement	569, 632, 985
Improvement of mouth, in connection with mouths of adjacent streams. <i>See</i> Galveston Bay and Harbor.	
Cedar City, Mo. <i>See</i> Missouri River.	
Cedar Creek, Conn. <i>See</i> Bridgeport Harbor.	
Cedar Creek, Del.:	
Examination	793
Examination for waterway via	643
Cedar Creek, Ill. (branch of Quincy Bay). <i>See</i> Mississippi River.	
Cedar Island, N. H. <i>See</i> Isles of Shoals.	
Cedar Keys Harbor, Fla.:	
Channel to Clearwater Harbor and Tampa, examination and survey	385
Examinations and surveys	209, 384, 387, 587, 793, 1126
Improvement	205, 240, 257, 268, 287, 308, 398, 440, 489, 551
Inside passage to Suwanee River, via Derrick Island Gap and Suwanee Sound, improvement	551, 566
Cedar Point-Dauphin Island shoal, Ala. <i>See</i> Dauphin Island, etc., under Mobile Bay, Harbor, and River.	
Cedar Point, Saugatuck (Westport) Harbor, Conn. <i>See</i> Westport Harbor.	
Cedar River, Iowa, survey	90
Cedar River, Mich. <i>See</i> Cedar River Harbor.	
Cedar River, Wash. <i>See</i> Duwamish River.	

Cedar River Harbor, Mich.:	Page.
Examinations and surveys	353, 354
Improvement	365, 408
Center Harbor, Me., examination and survey	1128
Centerville Creek, Manitowoc County, Wis., examination and survey	528
Central Canal and Irrigation Company, diversion of water from Sacramento River, Cal.	1156
Certification regarding necessity of printing matter contained in reports, including illustrations	726, 1042, 1137
Chagrin River, Ohio, examinations and surveys	325, 468, 525
Champlain Lake, N. Y. and Vt.:	
Adams (Tobias) Landing Harbor, Vt. <i>See</i> Tobias Landing Harbor.	
Burlington Harbor, Vt. <i>See</i> Burlington Harbor.	
Dredge boat, appropriations for	124, 129, 130
Four Channels, at the Narrows, examination and survey (<i>see also</i> Narrows, <i>infra</i> , and Whitehall Harbor)	422
Gordons Landing Harbor, Vt. <i>See</i> Gordons Landing Harbor.	
Grand Isle, Vt. <i>See</i> Gordons and Tobias Landing harbors.	
Gut, The (between North and South Hero islands). <i>See</i> North and South Hero islands, <i>infra</i> .	
Harbors on, improvement	144, 145
Maquam Bay and Harbor, Vt. <i>See</i> Swanton Harbor.	
Narrows, improvement (<i>see also</i> Four Channels, <i>supra</i> , and Whitehall Harbor)	445, 495, 624, 862, 925, 973, 1081, 1220
North and South Hero islands channel (The Gut), Vt., examinations and surveys	354, 1279
North and South Hero islands channel (The Gut), Vt., improvement	77, 80, 484
North Hero Harbor, Vt., examination	648
Plattsburg Harbor, N. Y. <i>See</i> Plattsburg Harbor.	
Port Henry Harbor, N. Y. <i>See</i> Port Henry Harbor.	
Port Marshall Harbor, N. Y. <i>See</i> Port Marshall Harbor.	
Rouse Point Harbor, N. Y. <i>See</i> Rouse Point Harbor.	
St. Albans Harbor, Vt. <i>See</i> St. Albans Harbor.	
South Hero Island, Vt. <i>See</i> North and South Hero islands, <i>supra</i> .	
Swanton Harbor, Maquam Bay, Vt. <i>See</i> Swanton Harbor.	
The Gut (between North and South Hero islands). <i>See</i> North and South Hero islands, <i>supra</i> .	
Tobias (Adams) Landing Harbor, Vt. <i>See</i> Tobias Landing Harbor.	
Whitehall Harbor, N. Y. <i>See</i> Four Channels and Narrows, <i>supra</i> , and Whitehall Harbor.	
Champlain River, N. Y., examination and survey	386
Champlin Creek, N. Y., examination and survey	592
Chandlers River, Me., examination and survey	794
Channels:	
<i>See also</i> Navigable waters.	
Adjacent to wharves, cases of improvement of, by U. S. to be reported	1011
Chapel Point Harbor, Md.	
<i>See also</i> Port Tobacco Creek, or River.	
Examinations and surveys	715, 798
Chapin, E. E., payment to	600
Chapowamsic Bay and Creek, Va. <i>See</i> Chopawamsic Bay and Creek.	
Charenton Canal, La.:	
Examination and survey	306
Improvement	350
Charges, tonnage. <i>See</i> Tolls.	
Charles, Cape, Va. <i>See</i> Cape Charles.	
Charles Lake, Calcasieu River, La. <i>See</i> Calcasieu Lake, River, and passes.	
Charles River, Mass.:	
Examination and survey	279
Improvement	310, 333, 546
Maintenance, under Boston Harbor appropriations. <i>See</i> Boston Harbor.	

	Page.
Charleston Harbor, S. C.:	
See also Ashley River, Charleston Neck Canal, and Town Creek.	
Examinations and surveys-----	185, 1020
Improvement-----	121, 193, 205, 215, 233, 240, 258,
268, 287, 308, 323, 335, 363, 398, 439, 488, 551, 616, 668, 669, 725,	
732, 850, 922, 927, 928, 958, 1024, 1036, 1057, 1091, 1133, 1234	
Waterway to Beaufort, S. C. (Mosquito Creek, connection of the	
South Edisto with the Ashepoo, etc.), examination and survey--	468
Waterway to Beaufort, S. C. (Mosquito Creek, connection of the	
South Edisto with the Ashepoo, etc.), improvement-----	979, 1092
Waterway to Santee River and opposite McClellanville (via Owen-	
daw and Wando rivers, Bulls Bay, and Alligator Creek, or	
River), examination and survey between Alligator Creek and	
Charleston-----	900
Waterway to Santee River and opposite McClellanville (via Owen-	
daw and Wando rivers, Bulls Bay, and Alligator Creek, or River),	
examination and survey for extension of Estherville-Minim Creek	
canal to Alligator Creek-----	900
Waterway to Santee River and opposite McClellanville (via Owen-	
daw and Wando rivers, Bulls Bay, and Alligator Creek, or River),	
examination and survey of Alligator Creek and other waters con-	
necting Santee River and Bulls Bay-----	468
Waterway to Santee River and opposite McClellanville (via Owen-	
daw and Wando rivers, Bulls Bay, and Alligator Creek, or River),	
examination and survey of Owendaw and Wando rivers and other	
waters connecting Bulls Bay and Charleston-----	526
Waterway to Santee River and opposite McClellanville, extension	
of, to Morrisons Landing, McClellanville-----	1234
Waterway to Santee River and opposite McClellanville (via Owen-	
daw and Wando rivers, Bulls Bay, and Alligator Creek, or River),	
improvement-----	958, 1234
Charleston Light and Water Company, dam of-----	1175
Charleston Neck Canal, S. C., examination and survey-----	328
Charlevoix Harbor, Mich.:	
Examinations and surveys-----	800, 1016
Improvement-----	260, 272,
292, 309, 336, 364, 400, 441, 491, 553, 619, 685, 756, 856, 968, 1108, 1252	
Charlotte Harbor, Fla.:	
See also Florida State, canal across.	
Boca Grande, and thence to Punta Gorda, examination and survey--	894
Examinations and surveys (limits not defined)-----	299, 464, 587
Extension of 12-foot depth to Punta Gorda, and along dock line	
thereat, examination and survey-----	1012
Improvement-----	551, 684, 753, 851, 980, 1094, 1238
Inside passage to Puntarasa (Pine Island Harbor, or Sound), exam-	
ination and survey-----	793
Inside passage to Puntarasa (Pine Island Harbor, or Sound), im-	
provement-----	695, 980
Waterway to St. Johns River, examination and survey-----	328
Charlotte Harbor (Genesee River), N. Y.:	
Examinations and surveys-----	43, 524
Improvement-----	48, 52, 56, 59, 63, 67, 71, 74, 79,
85, 100, 122, 126, 145, 153, 171, 175, 176, 177, 183, 192, 238, 273, 293,	
307, 334, 361, 397, 437, 486, 548, 614, 680, 747, 847, 925, 955, 1086, 1226	
Charts. See Illustrations.	
Chase, Otis F., payment to-----	600
Chatham Harbor, Mass.:	
New harbor, examination and survey-----	716
Stage Harbor, examination and survey-----	522
Stage Harbor, improvement-----	547, 745, 845
Chatham Roads, Mass.:	
See also Chatham Harbor.	
Examination for harbor of refuge (under Vineyard and Nantucket	
sounds)-----	953

Chattahoochee River, Ga., Fla., and Ala. :	Page.
Columbus, Ga., above, examination and survey	278
Columbus, Ga., below, examinations and surveys	124, 196
Columbus, Ga., to Chattahoochee, Fla., examination and survey	209
Dredge boat for	867
Erroneously mentioned for Choctawhatchee River	300, 303
Improvement	70, 230, 240, 257, 268,
287, 314, 343, 371, 404, 449, 500, 565, 628, 694, 770, 867, 979, 1093, 1236	
Proceeds of sales of lands to be applied to internal improvement from opposite West Point to Alabama State line toward Jackson, Miss	92
St. Andrews Bay, Fla., survey for route to	61
West Point, Ga., to Bolton, examination and survey	352
West Point, Ga., to Franklin, examinations and surveys	587, 867, 868
Chattanooga, Tenn. :	
See also Tennessee River.	
Construction of Scott Point (Hales bar) lock and dam, Tennessee River, by city of	1050, 1062
Chattanooga and Tennessee River Power Co. See Hales bar, under Tennessee River.	
Cheat River, W. Va. :	
Examinations and surveys	528, 563, 1022, 1280
Improvement	563
Cheboygan Harbor and River, Mich. :	
Examinations and surveys	686, 687, 897, 1108
Improvement	191, 203, 212, 228, 237,
259, 272, 293, 310, 336, 364, 400, 441, 491, 686, 757, 858, 966, 1108, 1252	
Cheesapeake Creek, N. J. :	
Examination and survey	299
Improvement	319, 339, 367, 1087, 1228
Chefuncte River, La. :	
Examinations and surveys	197, 299, 521, 715
Improvement	205, 350, 373, 569, 632, 698, 773, 871, 983, 1097, 1242
Chehalis River, Wash. :	
Examinations and surveys	234, 355, 595, 1132, 1267
Improvement	380, 410, 458, 515, 579, 622, 688, 790, 884, 972, 1117, 1267
Chelsea Creek, or River, Mass. :	
Examinations and surveys	645, 722
Improvement	744, 844
Maintenance, under Boston Harbor appropriations. See Boston Harbor.	
Chequamegon Bay, Wis. See Ashland Harbor.	
Cherrystone Creek, Va., examination and survey	388
Cherrystone Inlet, Va. See Cape Charles City Harbor.	
Chesapeake and Delaware Canal :	
Examinations and surveys	280, 332, 362, 692, 1191
Subscription to stock, voting for president and directors, and receipt of toll by U. S.	29, 49
Chesapeake and Delaware Canal Company. See Chesapeake and Dela- ware Canal.	
Chesapeake and Ohio Canal :	
Alexandria Canal, D. C., and Va., connection with, improvement	82
Extension from Cumberland, Md., to Ohio River, via North and South branches of Potomac River, survey	219
Extension from Cumberland, Md., to Ohio River, via Youghiogheny River, survey	233, 243
Right of way of Winchester and Potomac R. R. at Harpers Ferry not to injure	65
Subscription to stock, voting for president and directors, and receipt of toll by U. S.	45
Chesapeake Bay, Md. and Va. :	
See also Norfolk Harbor waterways.	
Battery Island, Md. See Susquehanna River.	
Chesapeake and Delaware Canal. See Chesapeake and Delaware Canal.	
Chesapeake and Ohio Canal. See Chesapeake and Ohio Canal.	

	Page.
Chesapeake Bay, Md. and Va.—Continued.	
Dredge boat	121
Headwaters, survey	78
Patapsco River to deep water above Sandy Point light-house. <i>See</i> Baltimore Harbor.	
Waterway to Charleston, S. C., survey from Dismal Swamp Canal to Winyah Bay for	82
York Spit, Va., channel through (included in project for Baltimore Harbor, Md.)	1088, 1089, 1203, 1230, 1293
Chesconnessex Creek, Va., examination and survey	919
Chester Creek, Pa.:	
Examination and survey	328
Improvement	349, 368
Chester Harbor, Ill. <i>See</i> Mississippi River.	
Chester Harbor, Pa. <i>See</i> Delaware Bay and River.	
Chester River, Md.:	
Examinations and surveys	328, 521
Improvement	341, 368, 562, 625, 692, 767, 865, 957, 1088, 1230
Kent Island Narrows, examinations and surveys	209, 1128
Kent Island Narrows, improvement	216, 230, 259, 267
Chetco River, Oreg., examination	647
Chevreuil Bayou, La., examination and survey	589
Cheyenne River, S. Dak., examination and survey	300
Chicago, Ill. <i>See</i> Chicago Harbor and River and Sanitary District of Chicago.	
Chicago and Atchison Bridge Company, payment to	538
Chicago Drainage Canal, Ill. <i>See</i> Sanitary District of Chicago.	
Chicago Harbor and River, Ill.:	
Anchorage grounds and rules governing movement of vessels, estab- lishment of	657
Calumet Harbor and River. <i>See</i> Calumet Harbor and River.	
Drainage canal. <i>See</i> Sanitary District of Chicago.	
Extension by city of water pipes, etc., and construction of piers into Lake Michigan	143, 480
Extension by Lakeview municipality of water pipes, etc., and con- struction of piers into Lake Michigan	538
Harbor, improvement	62, 67, 71, 74, 79, 84, 99, 101, 121, 145, 154, 171, 175, 176, 177, 184, 192, 202, 212, 227, 237, 256, 272, 292, 309, 336, 364, 399, 441, 490, 553, 619, 685, 856, 1112, 1259
Illinois and Michigan Canal. <i>See</i> Illinois and Michigan Canal.	
River, improvement, excavation by municipality of portion of U. S. reservation	117
River, including branches, examinations and surveys	619, 895, 1127
River, including branches, improvement	117, 685, 781, 813, 830, 895, 927, 994, 1259
River, including branches, improvement, scope, extent, depth, etc., of project defined	813, 895
River, mouth to junction of North and South branches, examina- tion and survey	326
River, North Branch, in front of Lakeview, examination and sur- vey	327
River, tunnels, bridges, and piers, obstructive, to be altered at local expense	895
River, tunnels, certain, declared to be obstructive, notices to alter ..	1054
Ship channel in waters connecting Great Lakes between Buffalo, Duluth, and. <i>See</i> Northern and Northwestern Lakes.	
South Chicago Harbor. <i>See</i> Calumet Harbor and River.	
South pier, lease of	602, 655, 728
Waterways to Mississippi River, via Illinois and Des Plaines rivers, etc. <i>See</i> Des Plaines and Illinois rivers and Michigan Lake.	
Chicago, Rock Island and Pacific Railroad Company, payment to	538
Chicago-Topeka Light, Heat and Power Company	672
Chickahominy Creek, or River, Va.:	
Examinations and surveys	234, 527, 595
Improvement	273, 287, 313, 341, 369, 446, 496, 562, 626

Chickasahay River, Miss.:	Page.
Examinations and surveys-----	278, 522, 1016
Improvement-----	568, 631, 697, 772, 871, 982, 1097, 1240
Chickasaw Bayou, Miss., examination and survey (under Yazoo River)-----	568
Chicomuxen Creek, Md., examination and survey-----	388
Chief of Engineers:	
<i>See also Army and Naval officers, Harbor lines, Reports, etc.</i>	
Index (Raymond's) to the Annual Reports of the-----	1010
Office of the, Board of Engineers for Rivers and Harbors. <i>See</i>	
Boards, etc.	
Chifuncte (Chefuncte) River, La. <i>See</i> Chefuncte River.	
Chigby, La. <i>See</i> Chevreuil Bayou.	
Chincoteague Bay and Inlet, Va.:	
Inlet, examinations and surveys-----	298, 528
Inlet into the Atlantic near the Hommacks, examination and sur-	
vey to Delaware line for-----	209
Waterway to Delaware Bay, Del., examination and survey for con-	
struction of bridges-----	1126
Waterway to Delaware Bay, Del., examination and survey with	
view to improvement-----	418
Waterway to Delaware Bay, Del., improvement--	446, 497, 563, 625, 691, 767
Waterway to Delaware Bay, Del., improvement discontinued----	1123, 1124
Waterway from Franklin to Cape Charles. <i>See</i> Franklin.	
Chipola River, Fla.:	
Examination and survey (limits not defined)-----	326
Improvement (limits not defined)-----	70, 75
Lower, improvement-----	629, 695, 771, 868, 925, 980, 1094, 1238
Mouth to Marianna, examinations and surveys-----	519, 793
Mouth to Wewahitchka, including the Cut-off and Lee Slough,	
examination and survey-----	519
Upper, improvement-----	869, 981, 1094, 1238
Chippewa River, Wis.:	
Examinations and surveys-----	209, 234, 245, 469, 702
Improvement-----	260, 274, 296
303, 318, 339, 375, 379, 409, 455, 508, 573, 635, 702, 779, 878, 1036	
Improvement discontinued-----	1008, 1009
Improvements not to interfere with existing modes of navigation	
on, including branches-----	297, 303, 318, 339, 375
Reservoirs at headwaters, examinations and surveys-----	263, 280, 294
Reservoirs at headwaters, railroads granted right of way through	
flowage lands, etc-----	251, 532, 536
Reservoirs at headwaters, restoration to public domain, subject to	
rights of flowage, etc., of lands heretofore withdrawn from	
market-----	544, 1076
Reservoirs at headwaters. <i>See also</i> Reservoirs, under Mississippi	
River.	
Chitto, Bogue, La.:	
Examinations and surveys-----	327, 521
Improvement-----	569, 632, 698, 773, 872, 983, 1242
Chocolate Bayou, Tex.:	
Examination and survey-----	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay	
and Harbor.	
Choctawhatchee Bay, Fla.:	
Bar at junction with Santa Rosa Sound, examination-----	643
Bar at mouth of Alaquia Bayou, examination-----	643
Route to St. Andrews Bay, survey-----	61
Choctawhatchee Power Company, dam of-----	1146
Choctawhatchee River, Ala. and Fla.:	
Dam of Choctawhatchee Power Co. at Newton, Ala-----	1146
Examinations and surveys-----	196, 300, 303, 518, 1271
Improvement, including Cypress Top outlet--	62, 103, 230, 240, 259, 287, 314,
343, 372, 405, 449, 501, 566, 629, 695, 771 868, 981, 1095, 1238	
Choctaw Pass and Point, Mobile Harbor, Ala. <i>See</i> Mobile Bay, Harbor,	
and River.	
Chopawamsic Bay and Creek, Va., examination and survey-----	197

	Page.
Choptank River, Md.:	
<i>See also</i> Cambridge and Black Walnut harbors.	
Examination and survey-----	298
Improvement -----	320,
341, 368, 402, 446, 496, 562, 625, 692, 767, 865, 957, 1088,	1230
Chowan River, N. C., examination and survey-----	280
Christiana Harbor and River, Del. <i>See</i> Wilmington Harbor.	
Chuckatuck Creek, Va.:	
Examination and survey-----	527
Improvement (under Nansemond River)-----	497
Church flats, Stono River, S. C. <i>See</i> Stono River.	
Churchs Cove Harbor, Little Compton, R. I. <i>See</i> Sakonnet Harbor and River.	
Cincinnati, Ohio. <i>See</i> Ohio River.	
Cincinnati, Wabash and Michigan Railroad Company, use of wing dam at Benton Harbor Canal, Mich-----	619
Cinders, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
City Island, N. Y., channel to New Rochelle Harbor, examination and survey-----	362
City limits, cases of improvements by U. S. within, to be reported-----	1011
City of Buffalo (schooner), removal of wreck of-----	260
Civilian employees. <i>See</i> Employees.	
Civilian engineers. <i>See</i> Employees.	
Clackamas River, Oreg., examination and survey-----	525
Clalborne Harbor, Md.:	
Examinations and surveys-----	715, 896
Improvement -----	957, 1088, 1230
Clallam Bay, Wash., examination-----	720
Clam (Glen) Cove, Me. <i>See</i> Glencove Harbor.	
Clams:	
<i>See also</i> Oysters.	
Fishing or dredging for shellfish, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Clarion River, Pa., examinations and surveys-----	355, 719
Clark County, Ky., payment to, from Kentucky River appropriation---	1104
Clark Creek, or River, S. C.:	
<i>See also</i> Lynch River.	
Examination and survey-----	468
Improvement-----	500, 565, 628, 1234
Clark Fork River, Idaho, examination and survey-----	591
Clark River, S. C. <i>See</i> Clark Creek, or River, and Lynch River.	
Clarksville Harbor, Mo. <i>See</i> Mississippi River.	
Claryville, Mo. <i>See</i> Mississippi River.	
Clatskanie River, Oreg.:	
Examinations and surveys-----	719, 801, 1131
Improvement -----	883
Clayton Harbor, N. Y., examination and survey-----	1130
Clear Creek, Tex.:	
Examination and survey-----	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Clear Lake, Cal., examination and survey-----	386
Clear Lake, La., waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Clearwater, Minn. <i>See</i> Mississippi River.	
Clearwater Harbor, Fla.:	
Examinations and surveys-----	418, 793
Examination and survey, including Boca Ceiga Bay to Tampa Bay.	1273
Examination and survey, including the Narrows into Boca Ceiga Bay -----	464
Examination and survey of channel to Cedar Keys and Tampa----	385
Clearwater River, Idaho:	
Diversion of funds to upper Columbia and Snake rivers-----	1003
Examinations and surveys-----	280, 1127
Improvement-----	294, 318, 379, 790, 883

	Page.
Cleveland and Pittsburgh Railroad Company:	
Erection of bridge upon Government piers at Cleveland, Ohio-----	158
Occupancy and use of Government east pier at Cleveland, Ohio-----	256
Cleveland and Toledo Railroad Company, erection of bridge upon Government piers at Cleveland, Ohio-----	158
Cleveland Harbor, Ohio:	
Canal to Ohio River. <i>See</i> Ohio Canal.	
Crib (municipal) in Lake Erie, erection of-----	178
Dredge boat for harbors on Lake Erie (<i>see also</i> Erie Lake)-----	965, 966
Examinations and surveys-----	219, 234, 384, 422, 739, 754, 755, 836, 917
Improvement-----	30, 37, 51, 52, 56, 60, 67, 74, 75, 80, 85, 101, 122, 126, 145, 153, 171, 175, 176, 177, 182, 213, 228, 242, 256 ³ , 273, 293, 309, 335, 363, 399, 440, 490, 552, 618, 685, 754, 810, 830, 840, 855, 927, 964, 965, 1025, 1038, 1057, 1058, 1104, 1134, 1135, 1200, 1249, 1292
Pier (Government), occupancy and use by railroad company-----	256
Piers (Government), erection of railroad bridge upon-----	158
Wharfage and storage room for Government plant and material, examination for-----	1131
Wharfage and storage room for Government plant and material, appropriation for-----	1249
Cleveland Yacht Club, modification of lease of Government water front at Cleveland, Ohio-----	1249
Clifford, Olivia M., claim of-----	938
Clinch River, Tenn. and Va.:	
Examinations and surveys-----	244, 245 ² , 325, 875
Improvement-----	322, 345, 374, 407, 453, 505, 570, 633, 699, 874, 987, 1103, 1248
Clinton and Kalamazoo Canal, Mich. <i>See</i> Clinton River.	
Clinton Harbor, Conn.:	
Examination and survey-----	353
Improvement-----	381, 548, 613
Clinton River, Mich.:	
Acceptance by U. S. of land from city of Mount Clemens for improvement of-----	507
Examinations and surveys-----	244, 299, 328, 420, 716
Extension of channel to old Clinton and Kalamazoo Canal-----	991
Improvement-----	122, 182, 192, 337, 374, 454, 507, 573, 635, 702, 778, 991, 1109, 1253
Club Creek, Ga.:	
Examination and survey of, for route between Altamaha River and Brunswick-----	1013
Improvement of, for route between Altamaha River and Brunswick-----	1236
Clubfoot and Harlowe Canal, N. C. <i>See</i> Norfolk Harbor waterways.	
Clubfoot Creek, or River, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examination and survey-----	388
Coal River, W. Va., examinations and surveys-----	469, 721
Coanjock Bay, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Improvement-----	313, 342, 370, 448, 499
Waterway from Norfolk Harbor to Albemarle Sound, via. <i>See</i> Norfolk Harbor.	
Coan River, Va., examination and survey-----	1132
Coast and Geodetic Survey:	
Examination for deep-water harbor, etc., at San Pedro Bay or at Santa Monica Bay, Cal.; by Board consisting of an officer of, etc-----	759, 810, 811
Examination of Brunswick outer bar, Ga., by-----	752
Examination of Brunswick outer bar, Ga., by Board consisting of the Superintendent of, etc-----	682, 683, 752
Survey of harbor and river at Washington, D. C., by Board consisting of Superintendent of, etc-----	198
Survey of South Pass, Mississippi River, by-----	249, 253
Survey for deep waterway from Great Lakes to the Atlantic, by Board consisting of an officer of, etc-----	816

Coaster Harbor Island, R. I.:	Page.
Examination and survey of cove and waterway-----	527
Improvement of cove and waterway-----	547, 925
Cobscook Bay, Me.:	
Examination and survey-----	76
Improvement-----	120
Cochecho River, N. H.:	
Examinations and surveys-----	47, 185, 523
Improvement-----	76, 79, 194, 208, 218, 232, 242, 256, 276, 379, 401, 444, 494, 558, 623, 689, 762, 861, 973, 1081
Cockpit Point, Potomac River, Va. <i>See</i> Potomac River.	
Cocodrie Bayou, La., examination and survey-----	589
Cod, Cape, Mass.:	
<i>See also</i> Cape Cod and Cape Cod Canal.	
Cape Cod Harbor. <i>See</i> Provincetown Harbor.	
Cod (Tangier) Harbor, Va. <i>See</i> Tangier Harbor.	
Coenties reef, East River, N. Y. <i>See</i> East River.	
Cœur d'Alene Lake and River, Idaho, examination and survey-----	423
Cohansey Creek, or River, N. J.:	
Examinations and surveys-----	208, 352, 1130
Improvement-----	217, 277, 286, 312, 339, 367, 1229
Cohasset Harbor, Mass.:	
Examinations and surveys-----	521, 897
Improvement-----	952
Colbert Shoals Canal, Tennessee River. <i>See</i> Tennessee River.	
Colby, Alonzo, relief of-----	137
Colby, Elbridge G., relief of-----	137
Cold Spring Bay and Harbor, N. Y.:	
Channel to Lloyds Harbor, examination and survey-----	328
Channel to Lloyds Harbor and Huntington Bay, examination and survey-----	1130
Channel to Lloyds Harbor and Oyster Bay, examination-----	795
Examination and survey-----	718
Cold Spring Inlet, N. J.:	
Examinations and surveys-----	718, 1129
Improvement of, by U. S., and of inner harbor by private parties---	1227
Coldwater River, Miss.:	
Examinations and surveys-----	278, 646, 794
Improvement-----	295, 314, 1097, 1241
Cole, Darius S., relief of-----	143
Cole (Coal) River, W. Va. <i>See</i> Coal River.	
Collection districts, location of each work with reference to, to be stated in annual reports-----	155, 164
Collectors of customs. <i>See</i> Revenue officers.	
Collins Bluff, Ark., gauging. <i>See</i> Gauging, under Mississippi River.	
Colonial Beach, Va. <i>See</i> Potomac River.	
Colorado, Arroyo, Tex., examination and survey from Harlingen to Point Isabel, on Laguna Madre-----	1279
Colorado River, Nev., Cal., and Ariz.:	
Examinations and surveys-----	230, 519 ² , 586, 714, 796, 916, 1012, 1017
Fort Yuma, Ariz., to 30 miles above Rioville, Nev., improvement---	410
Yuma, Ariz., improvement (construction of levee on Gila River)---	640, 835
Colorado River, Tex.:	
Examinations and surveys-----	595, 719, 900 ² , 1279
Improvement-----	120
Colorado (Arroyo) River, Tex. <i>See</i> Colorado, Arroyo.	
Colorado, State of:	
Examination for reservoirs-----	796
Formation of State government; certain proceeds of sales of lands to be applied to internal improvements-----	251
Columbia River, Oreg. and Wash.:	
Astoria Harbor, Wash., examination and survey-----	1131
Astoria, Wash., below Tongue Point, via south channel in front of. <i>See</i> Tongue Point, <i>infra</i> .	
Astoria, Wash., to Woods Landing, examination and survey-----	594
Bakers Bay, Wash., Ilwaco Harbor. <i>See</i> Ilwaco Harbor, <i>infra</i> .	

Columbia River, Oreg. and Wash.—Continued.	Page.
Bakers Bay, etc., Wash., to Willapa (Shoalwater) Bay, canal, examinations and surveys	244, 355
Cascade Locks, Oreg., removal of rock in rapids	1003
Cascades, construction by State of Oregon of portage railroad on U. S. lands	609
Cascades Canal, examination and survey	233
Cascades Canal, improvement	261,
	274, 294, 318, 348, 378, 410, 458, 514, 579,
	640, 668, 669, 740, 788, 805, 883, 1003, 1116
Cathlamet, Wash., payment to John and David West for damage to wharf	1219
Celilo Falls, above. <i>See</i> Upper, etc., <i>infra</i> .	
Clark Fork River. <i>See</i> Clark Fork and Pend Oreille rivers.	
Fivemile (The Dalles) rapids. <i>See</i> The Dalles rapids, <i>infra</i> .	
Gauging	377, 414, 461, 514, 707, 789, 883, 1002, 1118
Ilwaco Harbor, Wash., including channel along Sand Island, examination and survey	1132
Mouth, cancellation of contract with Oregon Paving and Contract Co	606
Mouth, examinations and surveys	274, 294, 379, 899
Mouth, improvement	274, 319, 348, 378, 410, 458, 514, 540 (Vol. II),
	579, 641, 706, 789, 931, 1002, 1041, 1117, 1150, 1201, 1266
Mouth to Willamette River, examinations and surveys	593, 899
Mouth to Willamette River, improvement	218, 232,
	242, 257, 274, 294, 319, 348, 378, 410, 458, 514,
	579, 641, 707, 788, 883, 1002, 1117, 1202, 1265
Mouth, transfer of Government plant to Grays Harbor	761, 762
Rock Island rapids, Wash., to Foster Creek rapids, improvement	706
Rock Island rapids, Wash., to international boundary, examinations and surveys	579, 649
Rock Island rapids, Wash, to Okanogan River, examination and survey	724
Rock Island rapids, Wash., to Priest rapids, improvement	579, 706, 819 ²
St. Helens bar, Oreg., examination and survey	210
Sand Island, Ilwaco Harbor, Wash. <i>See</i> Ilwaco Harbor, <i>supra</i> .	
Shoalwater (Willapa) Bay, Wash., to. <i>See</i> Bakers Bay, <i>supra</i> .	
Skamokawa, Wash., improvement	514
Snake River, above mouth of, examination and survey	424
Tenmile rapids. <i>See</i> The Dalles rapids to Celilo Falls, <i>infra</i> .	
The Dalles (Fivemile) rapids, examinations and surveys	233, 300
The Dalles (Fivemile) rapids to Celilo Falls, including Threemile and Tenmile rapids, examinations and surveys (boat railway, canals, etc.)	525, 640, 641, 918, 1003
The Dalles (Fivemile) rapids to Celilo Falls, including Threemile and Tenmile rapids, improvement (boat railway, canals, etc.)	706, 788, 1003, 1059, 1117, 1202, 1266
Threemile rapids. <i>See</i> The Dalles rapids to Celilo Falls, <i>supra</i> .	
Tongue Point, Oreg., below, examination and survey	723
Tongue Point, Oreg., below, improvement	789, 883
Upper, improvement	208,
	232, 242, 258, 274, 294, 319, 348, 378, 410,
	458, 514, 579, 641, 706, 788, 883, 1003, 1116
Upper, improvement, diversion of funds from appropriation for Clearwater River	1003
Upper, survey (precise limits not defined)	156
Upper, and tributaries, above Celilo Falls, examination and survey	1132
Upper, Celilo Falls, above, use upon improvements of moneys furnished by State of Oregon or Washington	1266
Upper, Celilo Falls to mouth of Snake River, examination and survey. <i>See</i> Upper, and tributaries, above Celilo Falls, <i>supra</i> .	
Upper, Celilo Falls to mouth of Snake River, improvement	1266
Upper, Celilo Falls to mouth of Snake River, use upon improvement of moneys furnished by State of Oregon or Washington	1266
Wallula, Wash., to British line, examination and survey	528

	Page.
Columbia River, Oreg. and Wash.—Continued.	
Wenatchee, Wash., to Bridgeport, examination and survey. <i>See</i>	
Wenatchee to Kettle Falls, <i>infra</i> .	
Wenatchee, Wash., to Bridgeport, improvement.....	1268
Wenatchee, Wash., to Bridgeport, use upon improvement of moneys furnished by State of Oregon or Washington.....	1266
Wenatchee, Wash., to Kettle Falls, examination and survey.....	1132
Willamette River to Vancouver, Wash., examinations and surveys.....	596, 1021
Willamette River to Vancouver, Wash., improvement.....	641, 642, 790, 925, 944, 1004, 1118, 1202
Willapa Bay, Wash., to. <i>See</i> Bakers Bay, <i>supra</i> .	
Yongs Bay, Oreg., examination and survey.....	594
Columbus Harbor, Ky. <i>See</i> Mississippi River.	
Combahee (lower portion of Salkahatchie) River, S. C. <i>See</i> Salka- hatchie River.	
Combined (consolidated, etc.) works. <i>See</i> Rivers and harbors.	
Commerce:	
<i>See also</i> Navigable waters, Rivers and harbors, and Tolls.	
Benefits to navigation and, from completion of works to be stated in annual reports.....	155, 164
Committee on, of the Senate. <i>See</i> Congress.	
Statistics, collection of, from masters, etc., of vessels, for inclusion in annual reports.....	607
Statistics, to accompany annual reports.....	155, 164
Statistics, to accompany reports on examinations and surveys (called for in general directions). <i>See</i> Examinations and surveys.	
Commercial statistics. <i>See</i> Commerce.	
Commissioner of docks and ferries, city of New York, N. Y., cooperation of Secretary of War with, in improvement of Jamaica Bay.....	1276
Commissioners of the District of Columbia:	
Granting of permission by, in cases of wharf construction, to deposit refuse matter in Potomac River or tributaries.....	743
Harbor lines in the District to be determined by Chief of Engineers and, and approved by Secretary of War.....	903, 904
Commissions. <i>See</i> Boards, etc.	
Committees, Congressional. <i>See</i> Congress.	
Compania Proveedora de Aguas de Ciudad Porfirio Diaz.....	598
Compensation for displacement of tidewater. <i>See</i> Deposits in naviga- ble waters and Structures.	
Compilations:	
<i>See also</i> Books, Binding, and Printing.	
Examinations, surveys, projects, and appropriations for rivers and harbors.....	791, 792, 1011
Index (Raymond's) to the Annual Reports of the Chief of En- gineers.....	1010
Laws for improvement of rivers and harbors.....	1010, 1063, 1281
Laws for protection and preservation of navigable waters, in force in 1896.....	790
Completion of projects, authority to prosecute work when appropri- ations or authorizations are insufficient for.....	1056, 1122, 1271
Compton Creek, N. J.:	
Examinations and surveys.....	386
Improvement.....	560, 625, 690, 765, 863, 975, 1087, 1228
Conanicut Island, Narragansett Bay, R. I. <i>See</i> Narragansett Bay.	
Concordia Lake, Mississippi River, La. <i>See</i> Natchez and Vidalia har- bors, under Mississippi River.	
Concurrent resolutions of Congress. <i>See</i> Congress.	
Condemnation of land, easements, rights of way, etc. <i>See</i> Land.	
Conecuh River, Ala.:	
Examinations and surveys.....	278, 1125
Improvement.....	372, 405, 449, 501, 566, 629, 695, 771, 868, 925, 981, 1095, 1238, 1239
Conemaugh River, Pa., examination and survey.....	280
Conewango Creek, N. Y. and Pa., survey for removal of dams.....	801

Coney Island channel, N. Y.:	Page.
Examination and survey	795
Examination and survey, and thence to Rockaway Inlet and Jamaica Bay	1190
Improvement	1225
Coney Island Creek, N. Y., examination and survey	795
Coney Island Point, N. Y., to Rockaway Inlet, examination and survey	278
Congaree River, S. C.:	
Diversion for open-channel work of balance of appropriation for lock and dam construction	1091
Examinations and surveys	423, 1278
Improvement (construction of lock and dam between Granby and Columbia)	867, 928, 941, 1026
Improvement (open-channel work)	449,
	500, 565, 628, 694, 770, 979, 1091, 1234
Limits of improvement extended to include project from Granby to Columbia	1234, 1235
Congress:	
See also Documents and Reports.	
Laws for improvement of rivers and harbors	1010, 1063, 1281
Laws for protection, etc., of navigable waters. See Navigable waters.	
Printing of reports of examinations and surveys prior to assembling of, in December	1125, 1213, 1281
Resolutions, etc., of House Committee on Rivers and Harbors and of Senate Committee on Commerce for review by Board of Engineers for Rivers and Harbors of projects and examination and survey reports	1006, 1007, 1124, 1281
Resolutions of, certain reports or estimates not to be made unless authorized by	649, 724, 791, 884, 1006, 1122, 1271
Congresses of Navigation, Permanent International Commission of	1027
Congressional Committees. See Congress.	
Congressional documents. See Documents, etc.	
Conneaut Creek and Harbor, Ohio:	
Dredge boat for harbors on Lake Erie (see also Erie Lake)	965, 966
Examinations and surveys	525, 593, 738
Improvement	48,
	52, 56, 60, 74, 80, 85, 100, 123, 153, 161, 176, 177, 182, 213, 228,
	238, 309, 618, 658, 685, 755, 855, 925, 964, 1038, 1058, 1105, 1240
Connecticut River:	
Bellows Falls, Vt., to Pittsburg, N. H., examination and survey	384
Eightmile River (Hamburg Cove), Conn., examination and survey	1272
Fifteenmile Falls, N. H., examinations and surveys	185, 196
Hartford, Conn., above, improvement	193, 207, 217, 322
Hartford, Conn., above and below, improvement	184
Hartford, Conn., below, examination and survey	586
Hartford, Conn., below, improvement	77,
	89, 98, 194, 207, 217, 232, 241, 256, 276, 283, 285, 311, 339, 367, 402,
	425 ² , 427, 445, 494, 535, 558, 623, 690, 763, 862, 925, 974, 1084, 1224
Hartford, Conn., to Holyoke, Mass., examinations and surveys	973, 1125, 1222
Hartford, Conn., to mouth, examinations and surveys	165, 586
Holyoke, Mass., to Enfield rapids, examination and survey	799
Conner, John, sr., claim of	1071, 1072 ²
Consolidated works, balances, allotments, and expenditures regarding	1005,
	1121, 1270
Contentnia Creek, or River, N. C.:	
Examination and survey	329
Improvement	342, 370, 404, 448, 499, 564, 627, 693, 866, 925, 1091, 1233
Contingencies, appropriation for. See Examinations and surveys.	
Continuance of work, when appropriations or authorizations are insufficient for completion	1056, 1122, 1271
Continuing contracts. See Contracts.	
Contractors. See Contracts.	
Contracts:	
Advertisements for proposals may be dispensed with in cases of restoration under emergency appropriations	912, 1004, 1005
Advertisements for proposals to precede letting of	155, 164,
	243, 262, 277, 297, 324, 352, 382, 415, 463, 515

Contracts—Continued.	Page.
Appropriations to be applied by, after advertising	154, 155
Appropriations to be applied by, or otherwise	164, 243, 262, 277, 297, 324, 352, 382, 415, 463, 515, 1005, 1121, 1270
Awards to be made to lowest responsible bidders upon sufficient security	155, 164, 243, 262, 277, 298, 324, 352, 382, 383, 415, 463, 515
Bonds of contractors to cover payment of liabilities for labor and material	324, 352, 382, 383, 415, 463, 676, 1072
Bonds, regulations regarding bids for contracts under War Department	264
Bonds to be furnished by contractors	155, 164, 243, 262, 277, 298, 324, 352, 382, 383, 415, 463, 515, 676, 1072
Combination in single, of two or more separate works	580, 1006, 1122, 1270
Continuing, authority to carry on work otherwise than by contract	1005, 1121, 1270
Continuing, authority to enter into (see various items, acts of 1890, 1892, 1896, 1899, 1902, 1905, 1907)	545, 611, 743, 843, 949, 1080, 1220
Continuing, authority to invite proposals when estimates exceed appropriations provided	893
Continuing, authority to prosecute work when appropriations or authorizations are insufficient for completion	1056, 1122, 1271
Continuing (act of 1896), limitation of obligations as to payments in a fiscal year	791
Continuing, rejection of disadvantageous bids and issuance of new proposals	642
Dredging plants, hiring of private, payment for, in customary manner or on reimbursement and percentage basis (see also Dredge boats)	1281
Not to be executed for payments in excess of appropriations made, unless so authorized	1206
Not to be executed unless authorized by law, or when appropriations are adequate for their fulfillment	23
Proposals, advertisements may be dispensed with in cases of restoration under emergency appropriations	912, 1004, 1005
Proposals, advertisements for, to precede letting of	155, 164, 243, 262, 277, 297, 324, 352, 382, 415, 463, 515
Proposals received for material, labor, etc., list of, with names of bidders, to be reported to Congress	155, 164
Proposals under War Department, regulations regarding	264
Prosecution of work, execution of contracts prohibited unless legally authorized, or when appropriations are adequate for their fulfillment	23
Prosecution of work, authority for, when appropriations or authorizations are insufficient for completion	1056, 1122, 1271
Prosecution of work, prohibition against, except when appropriations are specifically made or contracts authorized	1206
Protection of persons furnishing labor or material. <i>See</i> Bonds, <i>supra</i> .	
Regulations regarding bids under War Department	264
To be separate for each work and for each class of material or labor	155, 164
Contrary Lake, St. Joseph, Mo. <i>See</i> St. Joseph, under Missouri River.	
Cooper, Albert R., relief of	200
Cooper, Charles, relief of	197
Cooper Creek, N. J.:	
Examinations and surveys	646, 723
Improvement	765
Cooper River, S. C., canal to Santee River. <i>See</i> Santee Canal.	
Coosa River, Ga. and Ala.:	
Dam No. 5, examination and survey for locating and constructing	1272
Dams of private parties at Lock No. 2, Ala.	1154
Dam and forebay at Lock No. 4, Ala., completion of, at private expense	1168
Dam and forebay at Lock No. 12, Ala., construction of, by Alabama Power Co.	1289
Examination and survey for 6-foot navigation, and as to advisability of continuing project for locks and dams	980

Coosa River, Ga. and Ala.—Continued.	Page.
Horseleg shoals, examination and survey-----	1273
Improvement above East Tenn., Va., and Ga. (Selma, Rome and Dalton) R. R. bridge-----	257, 270, 291, 314, 343, 371, 404, 449, 500, 565, 629, 695, 770, 868, 979, 980, 1093, 1236
Improvement below East Tenn., Va., and Ga. (Selma, Rome and Dalton) R. R. bridge-----	565, 629, 695, 770, 979, 980, 1236
Improvement, assent of Congress to act of Alabama for, including connection with Tennessee River-----	26
Improvement, grant to State of Alabama of land in aid of-----	44, 73
Relief of Margaret Fillebrown, widow of Henry C. Fillebrown-----	211
Tennessee River, canal to, assent of Congress to act of Alabama for-----	26
Tennessee River, canal to, survey-----	196
Transportation route to the seaboard, survey-----	233
Wetumpka, Ala., to East Tenn., Va. and Ga. R. R. bridge, examination and survey-----	298
Wetumpka, Ala., to Greensport, examinations and surveys-----	185, 196
Wetumpka, Ala., to improvements above Ten Islands, examination and survey-----	518
Wetumpka, Ala., to mouth, examinations and surveys (sometimes under Alabama River)-----	243, 586, 1125, 1271
Coosawattee River, Ga., improvement-----	240, 270, 291, 314, 343, 371, 979
Coos Bay, Harbor, and River, Oreg.:	
Bay and harbor, examinations and surveys-----	277, 593, 1278
Bay and harbor, improvement-----	294, 348, 366, 401, 444, 494, 556, 622, 688, 761 ² , 830, 861, 925, 971
River, examinations and surveys-----	647, 723
River, improvement-----	789, 883, 1002, 1265
River, improvement, diversion of funds from appropriation for bay and harbor-----	1116
Copper Harbor, Mich.:	
Examination and survey-----	897
Examination and survey for harbor of refuge on south shore of Lake Superior in vicinity of Keweenaw Point-----	1129
Coquille River, Oreg.:	
Coquille to Myrtle Point, examinations and surveys-----	468, 594
Improvement-----	323, 379, 410, 458, 514, 579, 641 ² , 707 ² , 788, 789, 883 ² , 1002, 1116, 1265
Mouth, examinations and surveys-----	219, 281, 1278
Core Sound, N. C.:	
See also Drum Inlet, and Norfolk Harbor waterways.	
Mouth of North River to Beaufort Harbor, examination-----	718
Waterway from Beaufort, N. C., to Pamlico Sound, via. See Beaufort Harbor.	
Waterway from Dismal Swamp Canal to Winyah Bay, S. C., via. See Dismal Swamp Canal.	
Waterway from Norfolk, Va., to Beaufort Inlet, via. See Norfolk Harbor.	
Cornell, Charles H., dam of-----	1180
Cornells Creek and Landing, N. Y., waterway to Jamaica Bay, examination and survey-----	326
Corney Bayou, or River, La.:	
Examination and survey-----	465
Improvement-----	631, 697, 983, 1098, 1242
Cornish, Benjamin L., payment to-----	477, 536, 600
Cornwall, N. Y. See Hudson River.	
Corporate limits, cases of improvements by U. S. within, to be reported-----	1011
Corporations:	
See also Corporate limits, etc.	
Improvement of channels along New Jersey coast by, authority for.	1206
Improvement of navigable waters by, authority for-----	1005
Improvement of navigable waters by, cases to be reported to Congress-----	1011
Corps of Engineers, officers of the. See Army and Engineer officers, Boards, etc., and Reports.	

Corpus Christi and Padre Island Harbor Company, construction of deep-water harbor	Page. 603, 657, 855, 964
Corpus Christi Bay, Harbor, and Pass, Tex.:	
Channel from Aransas Pass to Corpus Christi, via Turtle Cove, etc., improvement	296, 315, 344, 363, 398, 440, 489, 1244
Channel from Aransas Pass to Corpus Christi, via Turtle Cove, survey	1127
Harbor, examinations and surveys	123, 186
Pass and channel, and Aransas Pass and Bay, up to Rockport and Corpus Christi, examination and survey	278
Ropes Pass, improvement at, by the Port Ropes Company	651
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Corsica Creek, or River, Md.:	
Examination and survey	353
Improvement	380, 403, 446, 496
Corsica shoal, Lake Huron, Mich. <i>See</i> Huron Lake.	
Corson Sound, N. J., examination and survey	421
Corvallis, Oreg. <i>See</i> Willamette River.	
Corydon, Pa. <i>See</i> Allegheny River.	
Coscob Harbor, Mianus River, Conn.:	
Examinations and surveys	586, 679, 680, 1272
Improvement	614, 679, 747
Improvement discontinued	1123
Coshoke Creek, N. C., improvement	448
Cottage City Harbor, Mass., examinations and surveys	466, 896
Cotuit Harbor, Mass., examination and survey	897
Council Bluffs, Iowa. <i>See</i> Missouri River.	
Courtableau Bayou, La.:	
Examinations and surveys	298, 1274
Improvement	319, 344, 406, 451, 502, 568, 698, 773, 872
Covington, Ky. <i>See</i> Ohio River.	
Cowessett Bay, R. I. <i>See</i> Apponaug Harbor.	
Cowles Creek, Ohio, examination and survey	525
Cowlitz River, Wash.:	
Examinations and surveys	300, 1280
Improvement	321, 350, 379, 410, 458, 515, 580, 641, 707, 790, 883, 1004, 1119, 1268
Cowpen bend, Mississippi River, Miss. <i>See</i> Natchez and Vidalia harbors, under Mississippi River.	
Craft, water. <i>See</i> Dredge boats, Tolls, Vessels, and Wrecks.	
Cranberry Inlet, Barnegat Bay, N. J.:	
<i>See also</i> Barnegat Bay, Harbor, and Inlet.	
Survey	120
Cranes Creek, Va., examinations and surveys	595, 724
Cranes River, Mass., examination and survey	521
Crawfish Creek, Cincinnati, Ohio. <i>See</i> Cincinnati, under Ohio River.	
Creditors. <i>See</i> Bonds, Contracts, Labor, Materials, etc.	
Creel Bay, Devils Lake, N. Dak., examination and survey	586
C. Reiss Coal Company, payment to, for work at Sheboygan Harbor, Wis	687
Crescent Bay, Cal. <i>See</i> Crescent City Harbor.	
Crescent City Harbor, Cal., examinations and surveys	165, 280, 463, 643, 721, 893
Crisfield Harbor, Md.:	
Examinations and surveys	235, 715, 1128
Improvement	238, 1230
Croatan Sound, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Connection with the ocean via Roanoke Sound and across Bodie Island, improvement	121, 128
Connection with the ocean (at Nags Head) via Roanoke Sound and Inlet, surveys	35, 97, 187
Waterway from Dismal Swamp Canal to Winyah Bay, S. C., via. <i>See</i> Dismal Swamp Canal.	
Waterway from Norfolk, Va., to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Waterway from Norfolk, Va., to sounds of North Carolina, via. <i>See</i> Norfolk Harbor.	

	Page.
Crockett, Fort, Galveston, Tex. <i>See</i> Galveston Bay and Harbor.	
Crooked (Carrabelle) River, Fla. <i>See</i> Carrabelle Harbor and River.	
Crooked River, Wash., examination and survey	595
Crooked Slough, Mississippi River, Ill. <i>See</i> Bellevue, Iowa, under Mississippi River.	
Cross Bayou, La., canal to Twelvemile Bayou	934
Cross Tides, Savannah Harbor, Ga. <i>See</i> Savannah Harbor and River.	
Cross Village Harbor, Mich., examinations and surveys	385, 421
Crow shoal, Delaware Bay, N. J. <i>See</i> Delaware Bay and River.	
Crow Wing River, Minn., dam of Judd Wright	1179
Crystal River, Fla.:	
Examinations and surveys	354, 519, 715, 793, 894, 1273
Improvement	981, 1094, 1238
Cuero, Tex. <i>See</i> Guadalupe River.	
Cuivre River, Mo.:	
Examinations and surveys	197, 298
Improvement	316, 347, 378
In Lincoln and St. Charles counties, declared not navigable	906
Culebra Island, P. R. <i>See</i> Great Harbor and Porto Rico.	
Cullums ripple, Ohio River. <i>See</i> Lock and Dam 37, under Ohio River.	
Cumberland, Md. <i>See</i> Chesapeake and Ohio Canal.	
Cumberland Island, Ohio River, Ky. <i>See</i> Ohio River.	
Cumberland River, Tenn. and Ky.:	
Burnside, Ky., above, including tributaries, improvement (locks and dams) by Cumberland River Improvement Co	1101, 1102, 1103
Falls, examination and survey	280
Jellico River, Ky., above mouth of, examination and survey	419
Mouth, examination and survey	798
Mouth to head of navigation, examinations and surveys	185, 196
Nashville, Tenn., above, improvement	257,
270, 290, 315, 345, 349, 374 ³ , 408, 453, 505, 570, 571, 633,	
699, 775 ² , 812, 830, 874, 986, 1023, 1101 ¹ , 1201, 1247, 1293	
Nashville, Tenn., above and below, improvement	61, 68, 75, 81
Nashville, Tenn., below, improvement	86, 194, 205, 215, 240, 270,
290, 315, 345, 374, 407, 453, 505, 570, 633, 699, 775, 874, 986, 1023, 1101	
Nashville, Tenn., below, survey for locks and dams of portion heretofore surveyed and without slack-water improvement	1247
Nashville, Tenn., to mouth, examination and survey	527
Nashville, Tenn., to the Cincinnati Southern R. R., Ky., examination and survey	389
Pineville, Ky., above, and principal tributaries, examination and survey	386
Smiths shoals, Ky., examination and survey	235, 355, 389
South Fork, Ky., examination and survey	327
South Fork, Ky., improvement (locks and dams) by Cumberland River Improvement Co	1101, 1102, 1103
South Fork, Ky., improvement by Engineer Department	374, 408, 453
Water-power privileges, leasing of	986, 987, 1023
Cumberland River Improvement Company. <i>See</i> Cumberland River.	
Cumberland Sound, Ga. and Fla.:	
Entrance, examination and survey	299
Improvement	823, 343, 363, 398, 439, 488, 551, 616, 683,
753, 809, 817, 828, 840, 921, 940, 1025, 1036, 1057, 1092, 1134, 1235	
Waterway from Fernandina, Fla., to St. Johns River. <i>See</i> Fernandina Harbor.	
Waterway from St. Marys Harbor and River, Ga. and Fla., to St. Johns River. <i>See</i> St. Marys Harbor and River.	
Waterway from Savannah, Ga., to Fernandina, Fla. <i>See</i> Savannah Harbor and River.	
Cunningham Creek, Ohio, improvement	34, 42, 51, 60, 63, 74, 75, 80, 85
Current River, Mo. and Ark.:	
Examinations and surveys	195, 326, 591, 643, 897
Improvement	204, 349, 699, 775, 874, 986, 1101, 1246
Currier shoals, Merrimac River, Mass. <i>See</i> Merrimac River.	
Currioman Bay, Va., examination and survey	328

Currituck Sound, N. C.:	Page.
<i>See also</i> Norfolk Harbor waterways.	
Improvement.....	275, 297, 313, 342, 370, 404, 448, 499
Waterway from Norfolk Harbor to Albemarle Sound, via. <i>See</i> Norfolk Harbor.	
Curtis Bay, Patapsco River, Md. <i>See</i> Baltimore Harbor.	
Customs, collectors of. <i>See</i> Revenue officers.	
Cut-off Canal, St. Francis River, Mo. <i>See</i> St. Francis River.	
Cut-off connecting Apalachicola and Chipola rivers, Fla. <i>See</i> Apalachicola Bay and River and Chipola River.	
Cuttyhunk Harbor, Mass. <i>See</i> Canapitsit Channel.	
Cuyahoga River, Ohio. <i>See</i> Cleveland Harbor.	
Cypress Bayou, Tex. and La.:	
Examination and survey for dam at foot of Caddo Lake on waterway between Shreveport, La., and Jefferson, Tex.....	1279
Examinations and surveys, including lakes, etc., between Shreveport, La., and Jefferson, Tex.....	185, 423, 465, 569, 632, 1021, 1100
Improvement, including lakes, etc., between Shreveport and Mooringsport, La., and Jefferson, Tex.....	205, 215, 257, 269, 288, 451, 503, 632, 698, 773, 1100, 1246
Waterway from Shreveport, La., to Fulton, Ark., via. <i>See</i> Shreveport.	
Cypress Brake (Black Lake), La., waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Cypress Top outlet, Choctawhatchee River, Fla. <i>See</i> Choctawhatchee River.	

D.

Dairy Fork, Tualitin River, Oreg. <i>See</i> Tualitin River.	
Dakota (James) River, N. and S. Dak. <i>See</i> James River.	
Dallas, Tex. <i>See</i> Trinity River.	
Dalles, The (Fivemile), rapids, Columbia River. <i>See</i> Columbia River.	
Damage to public structures by private parties. <i>See</i> Structures.	
Damariscotta River, Me.:	
<i>See also</i> East Boothbay Harbor.	
Examination and survey.....	1015
Improvement.....	1081
Dams:	
<i>See also</i> Buildings, Canals, etc., Contracts, Land, Navigable waters, Structures, and Tolls.	
Construction of, by private parties for power, etc., purposes, special act (June 21, 1906) regulating.....	1183
Construction, etc., of, by private parties, general laws enacted prior to special act of 1906 regarding, with reference to preservation, etc., of navigable waters. <i>See</i> Structures.	
Fish ways or ladders in Government structures, construction of, requirements regarding.....	518
In forest reserves, rights of way.....	1063
Permanent indefinite appropriation for operating and care of canals, etc. <i>See</i> Appropriations.	
Sites, etc., for, acquisition of, at private expense.....	1162, 1197
Sites, etc., for, acquisition of, authorized; method of procedure. etc.....	324, 351, 479
Dan Baker shoal, Delaware River. <i>See</i> Delaware Bay and River.	
Dan River, Va. and N. C.:	
Examinations and surveys.....	279, 299
Improvement.....	320, 341, 370, 403, 447, 448
D'Arbonne Bayou, or River, La.:	
Examination and survey.....	386
Improvement.....	406, 451, 502, 568, 631, 697, 983, 1098, 1242
Darby Creek, Pa., examination and survey.....	468
Dardanelle, Ark. <i>See</i> Arkansas River.	
Darien Harbor, Ga.:	
Examination and survey.....	418
Improvement.....	275, 551, 617, 683, 753, 851, 959
Darien River, Ga. <i>See</i> Darien Harbor.	

Darnes Quarter, Md.	<i>See</i> Upper Thoroughfare, under Deal Island.	Page.
Dauphin Island, Mobile Bay, etc., Ala.	<i>See</i> Mobile Bay, Harbor, and River.	
Davenport Harbor, Iowa.	<i>See</i> Mississippi River.	
Davenport Water Power Company, dam, etc., of	-----	1045, 1214
Davis Island, Ohio River, Pa.:		
Lock and Dam No. 1.	<i>See</i> Lock and Dam No. 1, under Ohio River.	
Pool No. 1.	<i>See</i> Pool No. 1, under Ohio River.	
Davis, Samuel S., dams of	-----	1152
Day, Call & Company, contractors, payment to laborers employed under	-----	391
Dead Horse Bay, N. Y.	<i>See</i> Dead Horse Inlet.	
Dead Horse Inlet, N. Y.:		
<i>See also</i> Jamaica Bay.		
Examination and survey of waters having outlet in	-----	1276
Deal, N. J., to Seabright, examination and survey for breakwater to protect harbor, etc., at Long Branch	-----	387
Deal Island, Md.:		
Lower Thoroughfare (between Deal and Little Deal islands), examinations and surveys	-----	328, 1274
Lower Thoroughfare (between Deal and Little Deal islands), improvement	-----	341, 368
Upper (Laws) Thoroughfare (between Deal Island and the mainland), examination and survey	-----	354
Upper (Laws) Thoroughfare (between Deal Island and the mainland), improvement	-----	368
Débris, mining, in California.	<i>See</i> California Débris Commission and California State.	
Decay in works.	<i>See</i> Preservation and repairs.	
Deckers Creek, W. Va., examinations and surveys	-----	1132, 1280
Decker, William, payment to	-----	600
Deep Bay, N. C., examination and survey of waterway to Swan Quarter Bay (<i>see also</i> Norfolk Harbor waterways)	-----	1278
Deep Creek, Long Island, N. Y.	<i>See</i> Dead Horse Inlet.	
Deep Creek Branch, Elizabeth River, Va.	<i>See</i> Dismal Swamp Canal and Elizabeth River, and Norfolk Harbor waterways.	
Deep River, N. C., examination and survey	-----	196
Deep River, Wash., examination and survey	-----	595
Deep Waterways Board.	<i>See</i> Boards, etc.	
Deep Waterways Commission.	<i>See</i> Boards, etc.	
Deer Creek, Miss., examination and survey	-----	421
Deer Island, Boston Harbor, Mass.	<i>See</i> Boston Harbor.	
Defacement of public structures by private parties.	<i>See</i> Structures.	
Delancey Cove, N. Y.	<i>See</i> Larchmont Harbor.	
Delaware and Chesapeake Canal.	<i>See</i> Chesapeake and Delaware Canal.	
Delaware Bay and River:		
Bordentown, N. J., to Trenton.	<i>See</i> Trenton to Bordentown, <i>infra</i> .	
Bridesburg, Pa., above and below.	<i>See</i> Philadelphia to the bay, <i>infra</i> .	
Bridesburg, Pa., to Trenton, N. J.	<i>See</i> Trenton to Philadelphia, etc., <i>infra</i> .	
Burlington, N. J., to Trenton.	<i>See</i> Trenton to Burlington, <i>infra</i> .	
Camden, N. J.	<i>See</i> Philadelphia, <i>infra</i> .	
Cherry Island flats, improvement	-----	294, 312, 340, 368
Chesapeake and Delaware Canal.	<i>See</i> Chesapeake and Delaware Canal.	
Chester Harbor, Pa., acceptance by U. S. of structures built by State	-----	38
Chester Harbor, Pa., cession by U. S., to city, of upper and lower ice-harbor piers	-----	438
Chester Harbor, Pa., examinations and surveys	34, 155, 186, 218, 244,	298
Chester Harbor, Pa., improvement	-----	382
	53, 57, 59, 64, 66, 71, 78, 81, 119, 163, 256, 274	
Chincoteague Bay, Va., waterway to.	<i>See</i> Lewes Harbor, <i>infra</i> .	
Cooper Creek, N. J., to Trenton.	<i>See</i> Trenton to Cooper Creek, <i>infra</i> .	
Crow shoals, N. J., examinations and surveys	-----	78, 218

Delaware Bay and River—Continued.

Page.

Dan Baker shoal, improvement.....	766
Delaware Breakwater Harbor, Del., claim of Maj. George Bender.....	73
Delaware Breakwater Harbor, Del., examinations and surveys.....	25, 355
Delaware Breakwater Harbor, Del., improvement 25, 45, 53, 57, 59, 63, 67, 71 74, 81, 86, 119, 152, 163, 306, 362, 397, 438, 487, 550, 615, 682, 750	306, 362
Delaware Breakwater Harbor, Del., removal of wrecks.....	306, 362
Easton, Pa., to Trenton, N. J. <i>See</i> Trenton to Easton, <i>infra</i> .	
Fivemile Point (above Bridesburg), Pa., examination and survey....	352
Fort Mifflin, Pa. <i>See</i> Mifflin, Fort, <i>infra</i> .	
Greenwich Point, Philadelphia, Pa. <i>See</i> Philadelphia, <i>infra</i> .	
Harbor of refuge in bay (at the Shears), examinations and surveys	594, 1012
Harbor of refuge in bay (at the Shears), improvement.....	750, 810, 828, 840, 927, 940
Horseshoe shoals, examinations and surveys.....	197, 216
Horseshoe shoals, improvement.....	216, 241
Ice harbor at head of bay, examination and survey.....	327
Ice harbor at head of bay, improvement.....	362
League Island, Pa., below, examinations and surveys.....	280, 327, 354
League Island, Pa., deposit of dredged material upon.....	608, 615
Lewes Harbor, Del., pier, improvement.....	188, 198, 199, 220, 231, 238, 241, 256, 277, 286, 308, 334, 368, 542, 751
Lewes Harbor, Del., pier, assignment of, to Public Health and Marine-Hospital Service.....	608
Lewes Harbor, Del., pier, occupancy of, by Junction and Break- water R. R.....	188
Lewes Harbor, Del., waterway to Chincoteague Bay, Va., examina- tion and survey for construction of bridges.....	1126
Lewes Harbor, Del., waterway to Chincoteague Bay, Va., examina- tion and survey with view to improvement.....	418
Lewes Harbor, Del., waterway to Chincoteague Bay, Va., improve- ment.....	446, 497, 563, 625, 691, 767
Lewes Harbor, Del., waterway to Chincoteague Bay, Va., improve- ment discontinued.....	1123, 1124
Lewes Harbor, Del., waterway to Rehoboth Bay, via Lewes Creek and Gordon Lake, examination and survey.....	1273
Liston's, Morris. <i>See</i> Listons Point, <i>infra</i> .	
Listons Point. <i>See also</i> Ice harbor at head of bay, <i>supra</i> .	
Listons Point, examinations and surveys.....	165, 327
Listons Point-Reedy Island dike, examination, etc., relative to navigation of Appoquinimink River and Blackbird Creek.....	766
Listons Tree Point. <i>See</i> Listons Point, <i>supra</i> .	
Marcushook Harbor, Pa., examinations and surveys.....	37, 245, 298
Marcushook Harbor, Pa., improvement.....	43, 48, 53, 56, 57, 59, 64, 66, 71, 154, 162, 322, 334, 362, 438, 487, 550
Mifflin, Fort, Pa., examination and survey at.....	37
Mifflin Fort, Pa., improvement at.....	43, 78, 216, 231, 241, 765
Mifflin, Fort, Pa., sale of U. S. land to International Navigation Co.	656
Newcastle Harbor, Del., improvement.....	34, 49, 53, 56, 59, 64, 66, 71, 74, 81, 86, 123, 187, 206, 216, 231, 238, 260, 267, 286, 308, 334, 397, 438, 487, 550
Perriwig bar, examination and survey.....	1130
Perriwig bar, improvement.....	691, 765, 1228
Petty Island, N. J. <i>See</i> Philadelphia, <i>infra</i> .	
Philadelphia, Pa., above, examination and survey.....	385
Philadelphia, Pa., above, improvement.....	446
Philadelphia, Pa., Petty (Treaty) Island, improvement.....	312
Philadelphia, Pa., shoal opposite Greenwich Point coal piers, exam- ination and survey.....	1131
Philadelphia, Pa., Smith Island, examination and survey.....	385
Philadelphia, Pa., Smith Island, improvement.....	312, 368
Philadelphia, Pa., to the bay, examinations and surveys.....	798, 864
Philadelphia, Pa., to the bay, improvement.....	241, 258, 277, 286, 312, 340, 368, 402, 864, 928, 941, 976, 1039, 1059, 1087, 1202, 1229
Philadelphia, Pa., to Camden, N. J., including removal of Smith, Windmill, and Petty islands, examinations and surveys.....	477, 478

Delaware Bay and River.—Continued.	Page.
Philadelphia, Pa., to Camden, N. J., including removal of Smith, Windmill, and Petty islands, improvement.....	446,
487, 550, 608, 615, 655, 667, 669, 725, 731, 804, 809	
Philadelphia, Pa., to Trenton, N. J. <i>See</i> Trenton to Philadelphia and to Cooper Creek, etc., <i>infra</i> .	
Philadelphia, Pa., tonnage duties.....	19
Philadelphia, Pa., Windmill Island, examination and survey.....	385
Piers in river, construction and repair.....	18 ² , 19 ²
Piers in river, tonnage duty for constructing, and otherwise improving navigation.....	19
Port Jervis, N. Y., to Trenton, N. J. <i>See</i> Trenton to Port Jervis, <i>infra</i> .	
Port Penn (Reedy Island) Harbor, improvement.....	43,
53, 57, 59, 64, 66, 71, 119, 362	
Port Penn (Reedy Island) Harbor, Del., examinations and surveys.....	37, 165, 327
Reedy Island, Del. <i>See</i> Listons Point and Port Penn Harbor, <i>supra</i> .	
Schooner ledge, improvement.....	297, 312, 340, 368
Shears, the, Del. <i>See</i> Delaware Breakwater Harbor and Harbor of refuge in bay, <i>supra</i> .	
Smith Island, Pa. <i>See</i> Philadelphia, <i>supra</i> .	
Tonnage duties.....	19
Treaty (Petty) Island, N. J. <i>See</i> Philadelphia, <i>supra</i> .	
Trenton, N. J., to the bay, improvement... 402, 446, 495, 560, 625, 691, 765, 864	
Trenton, N. J., to Bordentown, examination and survey.....	186
Trenton, N. J., to Bordentown, improvement.....	206, 216, 231
Trenton, N. J., to Burlington, examination.....	718
Trenton, N. J., to Cooper Creek, improvement.....	495
Trenton, N. J., to Easton, Pa., examination and survey.....	210
Trenton, N. J., Perriwig bar. <i>See</i> Perriwig bar, <i>supra</i> .	
Trenton, N. J., to Philadelphia, Pa. (Bridesburg), improvement.....	312,
340, 368, 402	
Trenton, N. J., to Philadelphia, Pa. (Christian street), improvement.....	864
Trenton, N. J., to Port Jervis, N. Y., examination and survey.....	387
Trenton, N. J., to Whitehill, improvement.....	241, 277, 286
Whitehill, N. J., to Trenton. <i>See</i> Trenton to Whitehill, <i>supra</i> .	
Windmill Island, Pa. <i>See</i> Philadelphia, <i>supra</i> .	
Woodbury Creek, N. J., dike (under Cooper Creek).....	765
Wrecks, removal of.....	306, 362
Delaware State line to Chincoteague Inlet, Va., examination and survey for inlet into the ocean near the Hommacks.....	209
Delta of Mississippi River. <i>See</i> Alluvial basin and Delta, under Mississippi River.	
Delta Point, Mississippi River, La. <i>See</i> Mississippi River.	
Dennis Creek, N. J.:	
Examinations and surveys.....	646, 723
Improvement.....	765
Dennis, J. C., payment to.....	214
Department of Justice. <i>See</i> Attorney-General.	
Department of War. <i>See</i> Appropriations, Bridges, Contracts, Estimates, Land, Navigable waters, Regulations, Reports, Rivers and harbors, and other general subjects.	
Deposits in navigable waters:	
<i>See also</i> Excavations, Philippine Islands, and Porto Rico.	
Alteration, etc., of course, location, condition, or capacity of channels, etc., by, forbidden unless authorized.....	582,
583, 584, 642, 887 ² , 890, 893, 906, 1010	
Displacement of tidewater, compensation for... 713, 887 ² , 890, 893, 906 ² , 1010	
Harbor lines, establishment of, beyond which deposits shall not be made without permission.....	462, 518, 584, 887 ² , 890, 893, 906 ² , 1010
New York Harbor, N. Y., and adjacent and tributary waters, including Long Island Sound, prevention of obstructive and injurious deposits (<i>see also</i> New York Bay and Harbor).....	462, 481, 708, 1010

	Page.
Deposits in navigable waters—Continued.	
Potomac River and tributaries, D. C., refuse matter, etc., prohibition regarding	743
Refuse matter, etc., prohibition regarding; lawful deposits; deposits by permits; regulations regarding transportation and dumping	581, 582, 583, 584, 712 ² , 713 ² , 888, 889, 890 ² , 893, 1010, 1122, 1123
Depths:	
Deterioration in, extent of, to be given in annual reports, with estimated cost of restoration	885
Referred to mean low water	884, 1005, 1121, 1270
Derelicts. <i>See</i> Wrecks.	
Deschutes River, Wash. <i>See</i> Olympia Harbor.	
Des Glaises Bayou, La.:	
Examinations and surveys	299, 521, 589
Improvement	704
Des Moines rapids, Mississippi River, including canal and dry dock. <i>See</i> Mississippi River.	
Des Moines Rapids Power Company	672
Des Moines River, Iowa:	
Grant to State of land in aid of improvement	109, 178
Survey	88
Survey for levee (under Egyptian levee)	784
Des Plaines River, Ill.:	
Chicago Drainage Canal, connection with, at Lockport. <i>See</i> Sanitary District of Chicago.	
Illinois and Michigan Canal. <i>See</i> Illinois and Michigan Canal.	
Mouth to Joliet, examination and survey	386
Waterway from Lake Michigan to Mississippi River, via. <i>See</i> Michigan Lake.	
Destruction of public structures by private parties. <i>See</i> Structures.	
Deterioration in works. <i>See</i> Preservation and repairs.	
Detroit River, Mich.:	
<i>See also</i> Northern and Northwestern Lakes.	
Back channel (west of Grosse Isle), from Ecorse to foot of Grosse Isle, examination and survey	916
Back channel, from main channel to Wyandotte, examination and survey	1015
Bridges (railroad) between Lakes Huron and Erie, construction of, with regard to interests of navigation	219
Detroit to Lake Erie, examinations and surveys	590, 877, 878
Grossepoint channel. <i>See</i> St. Clair Lake.	
Improvement	228,
272, 293, 318, 348, 375, 408, 454, 507, 635, 702, 778, 877,	
928, 941, 990, 1026, 1040, 1109, 1136, 1201, 1202, 1253 ²	
Ship channel in waters connecting Great Lakes between Chicago, Duluth, and Buffalo. <i>See</i> Northern and Northwestern Lakes.	
Uses, levels, etc., of waters of Great Lakes, including. <i>See</i> International Waterways Commission, under Northern and Northwestern Lakes.	
Devall Bluff, Ark. <i>See</i> White River.	
Devils Lake, N. Dak., examination and survey	586
De Vrees (Islais) Creek, Cal. <i>See</i> Islais Creek.	
Dexter Harbor, N. Y. <i>See</i> Black River.	
Diamond reef, East River, N. Y. <i>See</i> East River.	
Diaz, Porfirio, Mex. <i>See</i> Rio Grande River.	
Dickinson Bayou, Tex.:	
Examination and survey	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Digging for gold, etc., in Bering Sea, Alaska	910, 911
Dikes. <i>See</i> Structures.	
Dirt, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Disbursements of funds. <i>See</i> Disbursing officers and Expenditures.	
Disbursing officers (except those of the Regular Army) to furnish bond	155, 164
Discharge measurements. <i>See</i> Gauging, under Columbia and Mississippi rivers.	

Discontinuance of improvements:	Page.
Abandoned works.....	1008, 1009, 1123, 1124
Recommendations regarding unworthy works to accompany annual reports.....	886
Temporary suspension of improvement of Wateree River, S. C.....	1020
Dismal Swamp Canal, Va. and N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Improvement of natural channels at northern and southern entrances (Deep Creek and Joyces Creek).....	78, 87
Sale of stock of United States in.....	159, 168
Subscription to stock, etc., by United States.....	32, 49, 106
Waterway to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Waterway to sounds of North Carolina, via, survey.....	694
Waterway to Winyah Bay, S. C., survey.....	82
Dismal Swamp Canal Company. <i>See</i> Dismal Swamp Canal.	
Displacement of tide water, compensation for. <i>See</i> Deposits, etc., and Structures.	
District attorneys, U. S., violations of laws for protection, etc., of navigable waters to be reported by certain officials to, for prosecution, under direction of Attorney-General, etc.....	580, 581, 584, 890, 891, 1122, 1123
District engineers. <i>See</i> Army and Engineer officers, Boards, etc., and Reports.	
District of Columbia:	
Alexandria Canal. <i>See</i> Alexandria Canal.	
Anacostia River (Eastern Branch of the Potomac). <i>See</i> Anacostia River.	
Chesapeake and Ohio Canal. <i>See</i> Chesapeake and Ohio Canal.	
Commissioners of the. <i>See</i> Commissioners, etc.	
Harbor lines. <i>See</i> Harbor lines, and Anacostia and Potomac rivers.	
Potomac River. <i>See</i> Potomac River.	
Districts, collection. <i>See</i> Collection districts.	
Ditches, mining, etc., in forest reserves, rights of way.....	1063
Dividing Creek (La Trappe River), Md. <i>See</i> La Trappe River.	
Dividing Creek, N. J., examination and survey.....	795
Doboy bar, Ga.:	
Channel from Doboy Island (mouth of Darien River) to, examination and survey.....	464
Examination and survey.....	753
Improvement.....	449, 851, 959
Doboy Island, Ga., to Doboy bar, channel. <i>See</i> Doboy bar.	
Doboy Sound, Ga.:	
Channel from Doboy Island to Doboy bar, via. <i>See</i> Doboy bar.	
Waterway from Doboy to Sapelo, examination and survey.....	587
Waterway from Savannah, Ga., to Fernandina, Fla., via. <i>See</i> Savannah Harbor and River.	
Dock lines. <i>See</i> Harbor lines.	
Docks and ferries, commissioner of, city of New York, N. Y., cooperation of Secretary of War with, in improvement of Jamaica Bay.....	1276
Documenting of foreign-built dredges.....	1163
Documents, public:	
<i>See also</i> Reports.	
Exclusion of unnecessary matter; certificate as to necessity of printing, including illustrations.....	726, 1042, 1137
Printing of reports of examinations and surveys prior to assembling of Congress in December.....	1125, 1213, 1281
Restriction upon printing of books by Executive Departments.....	1138
Dog Island Harbor, St. George Sound, Fla. <i>See</i> Carrabelle Harbor and River.	
Dog River, Miss.:	
Examination and survey (under Pascagoula River).....	799
Improvement (included in project for lower Pascagoula River).....	870,
930, 982, 1040, 1059, 1097, 1240	
Dog River bar, Mobile Harbor, Ala. <i>See</i> Mobile Bay, etc.	
Dolphins. <i>See</i> Structures.	
Dominion of Canada. <i>See</i> Canada.	
Donaldsonville, La. <i>See</i> Mississippi River.	

	Page.
Donations of land, easements, rights of way, etc. <i>See</i> Land.	
Dorcheat Bayou, La.:	
Examinations and surveys.....	389, 521
Improvement.....	406, 503
Dorchester Bay, Mass.:	
Examination and survey.....	1128
Improvement, contingent upon certain work on Neponset River by State of Massachusetts.....	1221
Double Bayou, Tex.:	
Examinations and surveys.....	595, 821
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Dover, Del. <i>See</i> St. Jones River.	
Dover, N. H. <i>See</i> Cocheco River.	
Drawbridges. <i>See</i> Bridges.	
Drawings. <i>See</i> Illustrations.	
Dredge boats:	
<i>See also</i> particular localities, etc.	
For Atlantic coast and Great Lakes not to be constructed without Congressional authority; repeal.....	1057, 1281
Hiring of private dredging plants, payment for, in customary man- ner or on reimbursement and percentage basis.....	1281
Restriction on use in U. S. of those of foreign construction; docu- menting* of certain, constructed abroad.....	1163
Dredging and dredgings. <i>See</i> Deposits, Dredge boats, Excavations, and New York Bay and Harbor.	
Drum Inlet, N. C., examinations and surveys.....	593, 718
Drummond, Lake, Canal, Va. and N. C. <i>See</i> Dismal Swamp Canal.	
Dry Straits, Alaska, examinations and surveys for channel to Wrangell Narrows.....	1272
Dubuque Harbor, Iowa. <i>See</i> Mississippi River.	
Duck Creek Chain, Rock Island rapids, Mississippi River. <i>See</i> Missis- sippi River.	
Duck Creek (Smyrna) River, Del. <i>See</i> Smyrna River.	
Duck Hole, Merrimac River, Mass. <i>See</i> Merrimac River.	
Duck Island Harbor, Conn.:	
Examinations and surveys.....	385, 463, 1272
Improvement.....	548, 613, 679, 746, 925, 1084
Duck Pond Point, N. Y., examination and survey for breakwater.....	422
Duck River, Tenn.:	
Examinations and surveys.....	298, 648, 1279
Improvement.....	322, 345, 374
Duck River shoals, Tennessee River. <i>See</i> Tennessee River.	
Dues, tonnage. <i>See</i> Tolls.	
Dugdemonia Bayou, or River, La., examinations and surveys.....	465, 716
Dull, D. M. and C. P., claims of.....	383, 471
Duluth Canal, Minn. <i>See</i> Duluth-Superior Harbor.	
Duluth-Superior Harbor, Minn. and Wis.:	
Allouez Bay, Wis., examinations and surveys.....	596, 649, 724
Duluth Canal, aerial ferry.....	943
Duluth Canal, examination and survey.....	1258
Duluth Canal, land and piers, acceptance by U. S.....	492, 493, 688
Duluth Canal, land and piers, investigation, etc., regarding title of U. S.....	621
Duluth Harbor, examinations and surveys.....	522, 688, 1258
Duluth Harbor, improvement.....	195, 201, 227, 236, 255, 270, 286, 311, 338, 366, 401, 442, 443 ² , 492, 555, 621, 688, 758
Examinations and surveys.....	675, 720, 1182
Improvement.....	211, 758, 810, 828, 840, 927, 940, 970, 1025, 1111, 1202, 1258, 1293
Minnesota Point, Superior, examination and survey.....	528
Nemadji River, Wis., examinations and surveys.....	596, 649
St. Louis Bay and River, from Connors and Rices points to foot of first falls, examination and survey.....	421
St. Louis River, from foot of rapids to New Duluth, Minn., exami- nation and survey.....	1016

	Page.
Duluth-Superior Harbor, Minn. and Wis.—Continued.	
St. Louis River, from Grassy Point to Fond du Lac, Minn., examination and survey.....	591
Ship channel in waters connecting Great Lakes between Chicago, Buffalo, and. <i>See</i> Northern and Northwestern Lakes.	
Superior Bay (at Duluth and Superior), examination and survey--	299
Superior Harbor, examinations and surveys.....	155, 687
Superior Harbor improvement.....	161, 176, 177, 181, 190, 202, 255, 270, 286, 311, 338, 366, 401, 442, 492, 555 ² , 621, 687, 758
Dume, Point, Cal. <i>See</i> Deep-water harbor, under Pacific coast	
Dumpings. <i>See</i> Deposits and Excavations.	
Dunbar, Charles F., payment to.....	938
Duncan rocks, Juan de Fuca Strait, Wash. <i>See</i> Juan de Fuca Strait.	
Dunkirk Harbor, N. Y.:	
Examinations and surveys.....	156, 647, 718, 734, 898, 1277
Improvement.....	37, 42, 51, 52, 56, 57, 59, 67, 72 ² , 74, 80, 85, 100, 122, 162, 176, 177, 182, 192, 203, 213, 221, 228, 238, 255, 307, 397, 437, 486, 548, 614, 680, 734, 747, 810, 955
Dunklin County Transportation Company, acquisition from, of Cut-off Canal, St. Francis River, Mo.....	578
Durhams Estuary, N. C., examination and survey.....	647
Duties, tonnage. <i>See</i> Tolls.	
Duvals (Devall) Bluff, Ark. <i>See</i> White River.	
Duwamish River, Wash.:	
<i>See also</i> Puget Sound and tributaries.	
Examinations and surveys.....	386, 595, 803, 1132
Tributaries (Black, Cedar, and White rivers), survey.....	803
Duxbury Bay, Beach, and Harbor, Mass.:	
Bay and harbor, examinations and surveys.....	466, 794
Beach, examinations and surveys.....	165, 794
Improvement.....	76, 208, 218, 845
Dyersburg, Tenn. <i>See</i> Forked Deer River.	

E.

Eads, James B. <i>See</i> South Pass, under Mississippi River.	
Eagle Harbor, Mich.:	
Examination and survey.....	155
Examination and survey for harbor of refuge on south shore of Lake Superior in vicinity of Keweenaw Point.....	1129
Improvement.....	161, 236, 255, 270, 291
Eagle Pass, Tex. <i>See</i> Rio Grande River.	
Eagle Pass Water Supply Company.....	598
Earle, J. R., Development Company, dam of.....	1286
Earth. <i>See</i> Deposits and Excavations.	
Easements. <i>See</i> Land.	
East Bay, Fla.:	
Examinations and surveys.....	328, 1013
Improvement.....	1093
East Bay Bayou, Tex.:	
Examination and survey.....	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
East Boothbay Harbor, Me., examination and survey.....	1274
East Branch, Eightmile River, Conn., examination and survey.....	1272
East Branch, Westport River, Mass. <i>See</i> Westport Harbor and River.	
East Chester Creek, N. Y.:	
Examinations and surveys.....	195, 801, 1017, 1277
Improvement.....	217, 241, 277, 286, 312, 445, 495, 690, 764, 807, 974, 1086, 1226
East Chester Inlet, N. Y. <i>See</i> East Chester Creek.	
East Chicago, Ind. <i>See</i> Indiana Harbor.	
East Chop, Vineyard Haven, Mass. <i>See</i> Vineyard Haven Harbor.	
East Dennis, Barnstable Bay, Mass., survey.....	120
Eastern Branch, Elizabeth River, Va. <i>See</i> Elizabeth River and Norfolk Harbor.	

Eastern Branch, Potomac River, Md. and D. C. <i>See</i> Anacostia River.	Page.
East Fork, White River, Ind. <i>See</i> White River.	
East Galveston Bay, Tex. <i>See</i> Galveston Bay and Harbor.	
East Greenwich Harbor, R. I. <i>See</i> Greenwich Harbor.	
East Haddam Harbor, Conn. <i>See</i> Salmon River.	
East Norwalk Harbor, Conn. <i>See</i> Norwalk Harbor and River.	
Easton, Md. <i>See</i> Tred Avon Creek, or River.	
Easton Point, Md. <i>See</i> Tred Avon Creek, or River.	
East Pascagoula Harbor and River, Miss. <i>See</i> Pascagoula Harbor and River.	
East Pass, Apalachicola Bay, Fla. <i>See</i> Apalachicola Bay and River.	
East Pass, St. George Sound, Carrabelle, Fla. <i>See</i> Carrabelle Harbor and River.	
East Pearl River, Miss. <i>See</i> Pearl River and Ship Island Harbor and Pass.	
East Point Judith, R. I. <i>See</i> Point Judith Harbor and Pond.	
Eastport Harbor, Iowa. <i>See</i> Missouri River.	
Eastport Harbor, Me. :	
<i>See also</i> Lubec Channel.	
Improvement-----	401
Eastport Harbor, Mich. <i>See</i> Torch Lake, Lake Michigan.	
East River, Ga. <i>See</i> Brunswick Harbor.	
East River, N. Y. :	
Anchorage grounds, establishment, etc., of-----	480
Bronx (or Harlem) Kills to Harlem River. <i>See</i> Harlem River.	
Buttermilk channel. <i>See</i> Buttermilk channel.	
Coenties reef, examination and survey-----	899
Diamond reef, examination and survey-----	899
Hell Gate, examination and survey-----	156
Improvement, including Hell Gate-----	120, 171,
175, 176, 177, 183, 193, 206, 217, 231, 241, 255, 276, 285, 311, 339,	
357, 367, 402, 445, 495, 558, 624, 690, 764, 863, 903, 974, 1086, 1226	
Newtown Creek, junction with, examination and survey-----	280
North Brother and South Brother islands, between, examination and survey-----	1277
River, including Hell Gate, resurvey of project, including ledges near westerly shore-----	1226
Rock ledges between Broome and Twenty-third streets, New York city, examination and survey-----	524
Rock ledges near Tenth and Eleventh streets, New York city, examination and survey-----	467
Wallabout channel, examinations and surveys-----	795, 826
Wallabout channel, improvement-----	848
East Rockaway Creek, N. Y., examination and survey-----	524 ²
East San Pedro, Cal. <i>See</i> Wilmington Harbor.	
East Thomaston Harbor, Me. <i>See</i> Georges River.	
Echo Bay Harbor, New Rochelle, N. Y. :	
<i>See also</i> New Rochelle Harbor.	
Examinations and surveys-----	245, 718, 1277
Improvement-----	276, 285, 308, 334, 361, 954, 1224
Long rock, examination and survey-----	1084
Long rock, improvement-----	1084, 1224
Echols, John, partition of land adjoining Louisville and Portland Canal.	428
Ecorse, Mich. <i>See</i> Detroit River.	
Edenton Bay and Harbor, N. C. :	
Examinations and surveys-----	209, 245, 386
Improvement-----	275, 287, 404, 439, 958
Edgartown (Marthas Vineyard) Harbor, Mass. :	
Examination for harbor of refuge (under Vineyard and Nantucket sounds)-----	953
Examinations and surveys-----	34, 353, 521
Improvement-----	47, 208, 547, 613, 679
South Beach, examination and survey-----	353
Edgings, depositing of, into navigable waters. <i>See</i> Deposits, etc.	

	Page.
Edisto River, S. C.	
Guignard Landing, on South Branch, to the sea, examination and survey	325
Improvement	380, 404, 448, 500, 564, 628
Mouth to the Aiken and Edgefield line, examination and survey	1020
North and South Edisto rivers, connection of, via St. Pierre River and South (Ocella) Creek, examination and survey	526
North Fork, in counties of Orangeburg and Lexington, examination and survey	423
North Fork, mouth to Orangeburg, examination and survey	1278
South Fork, mouth to Scotts bridge, examination and survey	1278
Waterway from Charleston to Beaufort, S. C., via. <i>See</i> Charleston Harbor.	
Eel River, Cal., examination and survey	519
Eel River, Mass. <i>See</i> Plymouth Harbor.	
Egg Harbor and Bay, N. J. <i>See</i> Great Egg Bay and Little Egg Harbor Bay.	
Eighteenmile Creek, N. Y. <i>See</i> Olcott Harbor.	
Eightmile River, Conn., examination and survey	1272
Elba, Ala. <i>See</i> Pea River.	
El Estero (Estero Bay, near Santa Barbara), Cal. <i>See</i> Estero Bay.	
Elizabethport, N. J. <i>See</i> Staten Island-New Jersey channel.	
Elizabeth River, N. J. :	
Examinations and surveys	279, 718, 800
Improvement	294, 312, 339, 367, 560, 624, 690, 765, 975, 1087, 1228
Elizabeth River, Va. :	
Deep Creek Branch, examinations and surveys (<i>see also</i> Dismal Swamp Canal and Norfolk Harbor waterways)	48, 719, 836
Deep Creek Branch, improvement. <i>See</i> Dismal Swamp Canal and Norfolk Harbor waterways.	
Eastern Branch to Lynnhaven Bay, waterway, examination and survey	595
Norfolk Harbor (including Eastern, Southern, and Western branches, and main stream). <i>See</i> Norfolk Harbor.	
Southern Branch, from navy-yard to Albemarle and Chesapeake Canal, examination and survey	196
Southern Branch, improvement	216, 231, 240, 258, 267
Western Branch, examinations and surveys	595, 719, 739, 1132
Western Branch, improvement	708
Elizabethtown, Ill. <i>See</i> Ohio River.	
Elk River, Md. :	
Examinations and surveys	219, 521, 896, 1128
Improvement	231, 240, 319, 341, 379, 562, 625, 977, 1089, 1231
Elk River, Tenn. and Ala. :	
Examinations and surveys	423, 822, 1020, 1279
Grant to State of Alabama of land in aid of connecting navigation of, with Tennessee River	44, 45, 73
Improvement	875
Elk River, W. Va. :	
Examinations and surveys	245, 595, 721, 901, 1022
Improvement	273, 294, 320, 342, 370, 447, 497, 563, 627, 693, 769, 866
Ellicott, Philip T., relief of	137
Elliot Bay, Wash., waterway from Puget Sound to Lake Union, etc., via. <i>See</i> Puget Sound.	
Elliott (Wappoo) Cut, S. C. <i>See</i> Wappoo Cut.	
Ellis Island, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Ellsworth, Me. <i>See</i> Union River.	
El Moro Harbor (Estero Bay, San Luis Obispo County), Cal., examinations and surveys	208, 714
Embaras River, Ill., examination and survey	644
Emergency appropriations. <i>See</i> Appropriations.	
Emory River, Tenn., examinations and surveys	244, 648, 802
Empire Bay and Harbor, Mich., examinations and surveys	327, 466

Employees :	Page.
<i>See also</i> Labor.	
Board of Engineers for Rivers and Harbors-----	1007
Disbursing officers, civilian, to furnish bond-----	155, 164
Duties, etc., of agents, assistant engineers, and inspectors in en-	
forcement of laws for protection, etc., of navigable waters-----	584,
	890, 1122, 1123
Employment by Chief of Engineers of retired officers of Army or	
Navy-----	792
Engineers, civil, employment of, on western and northwestern rivers,	
authorized-----	168
Engineers, civilian, information relative to employment to be fur-	
nished Congress annually-----	469
Services, voluntary or personal, acceptance of, forbidden, except in	
certain emergencies-----	394
Employment. <i>See</i> Employees.	
Enforcement of laws for protection, etc., of navigable waters. <i>See</i>	
Attorney-General and District attorneys.	
Engineer officers :	
<i>See also</i> Army officers, Boards, etc., and Reports.	
Duties of, in enforcement of laws for protection, etc., of navigable	
waters-----	584, 890, 1122, 1123
Service of retired, upon International Waterways Commission-----	1205
Engineers, assistant. <i>See</i> Employees.	
Engineers, Boards, etc., of. <i>See</i> Boards.	
Engineers, Chief of. <i>See</i> Army and Naval officers, Chief of Engineers,	
Harbor lines, Reports, etc.	
Engineers, Chief of, Office of the, Board of Engineers for Rivers and	
Harbors. <i>See</i> Boards, etc.	
Engineers, civil. <i>See</i> Employees.	
Engineers, civilian. <i>See</i> Employees.	
Engineers, Corps of, officers of the. <i>See</i> Army and Engineer officers,	
Boards, etc., and Reports.	
English Kills Branch, Newtown Creek, N. Y. <i>See</i> Newtown Bay and	
Creek.	
Engravings. <i>See</i> Illustrations.	
Entry, ports of. <i>See</i> Ports of entry.	
Erie Canal, N. Y. :	
Basin at Buffalo. <i>See</i> Buffalo Harbor.	
Control and regulation in re diversion of water from, for power, etc.	
purposes-----	1192, 1209
Enlargement of, etc. <i>See</i> New York State.	
Erie Harbor, Pa. :	
Examinations and surveys-----	26, 741, 750, 802, 1278
Improvement-----	28, 31, 35, 42,
51, 56, 59, 63, 67 ² , 71, 74, 75, 80, 85, 100, 122, 145, 153, 161,	
171, 175, 176, 177, 182, 192, 203, 228, 238, 260, 273, 293, 308, 334,	
362, 397, 438, 487 ² , 550, 615, 682, 742, 750, 849, 956, 1087, 1229	
Presque Isle peninsula, acquisition by U. S. of title to-----	200, 438
Presque Isle peninsula, construction of waterworks, etc., and use of	
land by city-----	658, 1055
Erie Lake :	
<i>See also</i> Northern and Northwestern Lakes.	
Black Rock Harbor, Buffalo, N. Y., extension of waterworks into.	
<i>See</i> Buffalo Harbor.	
Dam at outlet, report by International Waterways Commission----	1007
Dredge boats, appropriation for-----	74, 122, 129, 130, 965
Erie Harbor, Pa., extension of waterworks into. <i>See</i> Erie Harbor.	
Harbors on, improvement-----	144, 145
Huron Lake to, channel from, investigation relative to construction	
of railroad bridges with regard to interests of navigation-----	219
Ohio River, canal from Cleveland, Ohio. <i>See</i> Ohio Canal.	
Ohio River, canal from vicinity of Pittsburg, Pa. (Lake Erie and	
Ohio River Ship Canal)-----	1207
Ohio River, canal from Toledo, Ohio, to. <i>See</i> Miami and Erie	
Canal.	

Erie Lake—Continued.	Page.
Ontario Lake, canal to, around Niagara Falls, etc., surveys-----	167, 523
Starve Island reef, near South Bass Island, Ohio, survey-----	802
Wabash River, canal to. <i>See</i> Wabash and Erie Canal.	
Escambia River, Fla.:	
Examination and survey-----	278
Improvement-----	62, 75, 321, 343, 372, 405 ² , 449, 501, 566, 629, 695, 771, 868, 925, 981, 1095, 1238
Esopus Creek, N. Y. <i>See</i> Saugerties Harbor.	
Espirito Santo Bay, Tex.:	
Channel from Aransas Pass to Guadalupe River. <i>See</i> Aransas Bay, Harbor, and Pass.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Essex River, Mass.:	
Examinations and surveys-----	590, 1128
Expenditure of improvement funds contingent upon financial contribution by State of Massachusetts, etc-----	1221
Improvement-----	623, 689, 763, 862, 1221
Estero Bay (San Luis Obispo County), Cal. <i>See</i> El Moro Harbor.	
Estero Bay (near Santa Barbara), Cal., examination and survey-----	219
Estero Bay, Fla., examination and survey-----	1273
Estero Creek, or River, Fla., examination and survey-----	1012
Estherville-Minim Creek Canal, S. C. <i>See</i> Santee River.	
Estimates of funds required:	
Annual, requirements regarding reappropriation of certain unexpended balances-----	225
Annual, requirements regarding submission of-----	105, 155, 164, 415, 669, 815, 1186
Deterioration in works, etc., cost of restoration to be given in annual reports-----	885
For new works, not to be made unless authorized by Congress; supplemental or additional reports not to be made after submission of regular ones-----	649, 724, 791, 884, 1006, 1122, 1271
Projects, amounts for ensuing fiscal year and for completion to be stated in annual reports-----	155, 164
Special, requirements regarding submission of-----	105
Etna, Wash. <i>See</i> Lewis River.	
Etowah River, Ga.:	
Examinations and surveys-----	196, 278
Improvement-----	258, 371
Eureka Harbor, Cal. <i>See</i> Humboldt Bay and Harbor.	
Everett Harbor, Wash.:	
Examinations and surveys-----	649, 1132
Improvement-----	708, 729, 762, 861, 928, 941, 947, 1026
Examinations and surveys:	
<i>See also</i> Congress, Estimates, Projects, and Reports.	
Appropriations for, with directions, etc., regarding, including provision for inspection, etc., of bridges, incidental repairs, contingencies, etc-----	26, 28, 31, 35, 42, 50, 54, 57, 61, 64, 67, 72, 76, 83, 84, 94, 151, 154, 155 ² , 160, 164, 165 ² , 175, 185 ² , 188, 195 ² , 208 ² , 210, 218 ² , 233 ² , 243 ² , 262 ² , 263, 266, 277 ² , 281, 297, 298, 300, 324 ² , 329, 352 ² , 355, 379, 382, 384, 389, 415, 417, 424, 463 ² , 469, 515, 518, 528, 585, 596, 643, 649 ² , 714, 721 ² , 724, 791, 792, 796, 884, 893, 911, 912 ² , 926, 1005, 1006, 1011, 1121, 1124, 1270, 1271 ² , 1280, 1281
Completion of, including reports thereon (under act of 1907), by November, 1908-----	1281
Compilations of, heretofore made-----	791, 792, 1011
Payment from appropriation for, of certain expenses in construction of Hales bar (Scott Point) lock and dam, Tennessee River--	1053
Payment from appropriations for, of expenses in examinations, etc., of plans or sites of bridges or other structures, or of alleged violations of laws for preservation of navigable waters, or in establishment, etc., of harbor lines-----	1123

Examinations and surveys—Continued.	Page.
Payment from appropriations for, of expenses in execution of law governing transportation and dumping into navigable waters of refuse, etc., matter.....	1122, 1123
Payment from appropriation for, of expenses in execution of law relative to construction of wharves, etc., in Porto Rico.....	1271
Payment from appropriations for, of expenses of inspections of work of completion, at private expense, of dam, etc., at Lock No. 4, Coosa River, Ala.....	1169
Printing of reports of, prior to assembling of Congress in December.....	1125, 1213, 1281
Review of reports of, by Board of Engineers for Rivers and Harbors.....	1006, 1007, 1011, 1124, 1281
Excavations in navigable waters:	
See also Deposits, Dredge boats, Philippine Islands, and Porto Rico.	
Alteration, etc., of course, location, condition, or capacity of channels, etc., by, forbidden unless authorized.....	582,
	583, 584, 642, 887 ² , 890, 893, 1010
Displacement of tidewater, compensation for ..	713, 887 ² , 890, 893, 906 ² , 1010
Mining for gold, etc., in Bering Sea, Alaska.....	910, 911
Executive documents. See Documents, etc.	
Exeter River, N. H.:	
Examinations and surveys.....	234, 800
Improvement.....	311, 338, 861, 973
Expenditures, fiscal:	
See also Appropriations and Contracts.	
Combination in single proposals or contracts of two or more separate works.....	580, 1006, 1122, 1270
Consolidated works, method of making allotments.....	1005, 1121, 1270
Harbor lines, use of appropriations for dredging inside of, prohibited.....	643
Lands, acquisition of, steps to be taken prior to making.....	95, 479
Statements of, under certain appropriations, to be included in annual reports. See Reports.	
To be by contract, after advertising.....	154, 155
To be by contract or otherwise.....	164,
	243, 262, 277, 297, 324, 352, 382, 415, 463, 515, 1005, 1121, 1270
To be judicious and economical.....	382, 414, 462
Expenses. See Expenditures.	
F.	
Fairhaven, Mass. See New Bedford Harbor.	
Fairhaven, N. Y. See Little Sodus Bay Harbor.	
Fairlee Creek, or Inlet, Md.:	
Examination and survey.....	466
Improvement.....	496, 562
Fairport Harbor, Grand River, Ohio:	
See also Grand River.	
Claim of American Transportation Co.....	676
Dredge boat for harbors on Lake Erie (<i>see also</i> Erie Lake).....	965, 966
Examination and survey.....	739
Improvement.....	30, 34, 41, 52, 56, 60, 67, 74,
	87, 101, 122, 145, 153, 161, 228, 238, 260, 273, 309, 335, 363, 399,
	440, 490, 534, 552, 618, 676, 685, 755, 855, 925, 964, 1104, 1249
Occupancy and use of Government pier by owners of dock property.....	490, 534, 552
Fairy (Caddo) Lake, Tex. and La. See Cypress Bayou.	
Falia, Bogue, La.:	
Examinations and surveys.....	327, 465, 521, 715
Improvement.....	373, 451, 569, 632, 698, 773, 871, 983, 1097, 1242
Falia (Phalia), Bogue, Miss. See Phalia, Bogue.	
Falkners Island Harbor, Conn., examination and survey.....	418
Fall River Harbor, Mass.:	
Examinations and surveys, including Mount Hope Bay.....	218, 716, 799
Improvement, including Mount Hope Bay.....	231, 241, 256, 845, 952, 1038

Falls Island, Cobscook Bay, Me. <i>See</i> Cobscook Bay.	Page.
Falls of Ohio River. <i>See</i> Ohio River.	
Falmouth Harbor, Mass.:	
Examination for harbor of refuge (under Vineyard Sound)-----	953
Examination and survey-----	466
False Bay, Cal. <i>See</i> San Diego Harbor.	
False Presque Isle Harbor, Mich., examination and survey-----	522
Farm Creek, Ill., examination and survey-----	464
Farrell, Edward J., relief of-----	1067
Far Rockaway, N. Y. <i>See</i> Jamaica Bay.	
Far Rockaway Bay, N. Y.:	
Channel to Jamaica Bay, examination and survey-----	467
Channels via. <i>See</i> Jamaica Bay.	
Fayerweather Island, Black Rock Harbor, Conn. <i>See</i> Black Rock Harbor.	
Feather River, Cal.:	
Diversion of funds for construction of dredge for rivers tributary to Suisun and San Pablo bays-----	409, 410, 457
Examinations and surveys (limits not defined)-----	586, 787
Examination and survey, including tributaries, with a view to improvement in conjunction with State of California-----	1116
Improvement-----	243, 274,
378, 409, 457, 514, 540 (Vol. I), 579, 640, 705, 787, 1001, 1115, 1265	
Improvement to be in charge of a Board of Engineers-----	787
Marysville, above, examination-----	714
Marysville, below, examination and survey-----	234
Protection, etc., of, and tributaries from injury from mining débris. <i>See</i> California Débris Commission and California State.	
Receipt and use by U. S. of State dredge, etc., for river and harbor improvements-----	882
Federalburg, Md. <i>See</i> Nanticoke River.	
Fernandina Harbor, Fla.:	
<i>See also</i> Amelia River and Cumberland Sound.	
Examination and survey-----	1126
Improvement-----	1236
Waterway from St. Johns River to St. Marys Harbor and River. <i>See</i> St. Johns River.	
Waterway to St. Johns River, examination and survey-----	235
Waterway to St. Johns River, improvement-----	287, 314
Waterway to Savannah, Ga., examinations and surveys (<i>see also</i> waterway from Doboy to Sapelo, under Doboy Sound)-----	587, 1236
Waterway to Savannah, Ga., improvement-----	629, 695, 771, 980, 1092, 1236
Ferry (Caddo) Lake, Tex. and La. <i>See</i> Cypress Bayou.	
Fidalgo Bay, Wash. <i>See</i> Anacortes Harbor.	
Fifteenmile Falls, Connecticut River, N. H. <i>See</i> Connecticut River.	
Fillebrown, Henry C., relief of widow of-----	211
Fillebrown, Margaret, relief of-----	211
Fillings. <i>See</i> Deposits and Excavations.	
Filth, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Fines. <i>See</i> Penalties.	
Finholloway River, Fla., examination and survey-----	326
Fire Island Inlet, N. Y., examination and survey-----	1130
Fiscal-year appropriations. <i>See</i> Permanent annual, under Appropriations, and Mound City to Cairo, under Ohio River.	
Fishers Island, N. Y. <i>See</i> West (Hay) Harbor.	
Fishing Creek, N. C.:	
Examination and survey-----	525
Improvement-----	564, 628, 769, 867, 979, 1091
Fishing or dredging for shellfish, New York Harbor, etc., N. Y. <i>See</i> New York Bay and Harbor.	
Fishing Place (Churchs) Cove, Little Compton, R. I. <i>See</i> Sakonnet Harbor and River.	
Fishing Rock (Fishrock) Harbor, Cal. <i>See</i> Fishrock Harbor.	
Fish River, Ala., examination and survey-----	1012
Fishrock Harbor, Cal., examination and survey-----	519

Fishways:	Page.
At Government dams, requirements regarding-----	518
At private power, etc., dams, provision for-----	1184
Fisks Mill Cove, Cal., examination and survey-----	519
Fivemile Creek, Ala., waterway to Black Warrior River. <i>See</i> Black Warrior River.	
Fivemile (The Dalles) rapids, Columbia River. <i>See</i> Columbia River.	
Fivemile River Harbor, Conn.:	
Examinations and surveys-----	463
Improvement-----	485, 548, 613, 679, 746, 846, 954, 1084, 1224
Flag Lake and River, Wis. <i>See</i> Port Wing Harbor.	
Flatbeach, N. J., survey-----	48
Flathead River, Mont.:	
Columbia Falls to Clark Fork River, examination-----	717
Flathead Lake to Jocko station, examination (under Pend Oreille River)-----	717
Improvement-----	787
In "Idaho," survey-----	797
Fletcher, Loren, payment to-----	929
Flint Island, Ohio River. <i>See</i> Ohio River.	
Flint River, Ga. and Fla.:	
Albany, Ga., at and above, examination and survey-----	520
Albany, Ga., to Chattahoochee, Fla., examination and survey-----	209
Albany, Ga., to Montezuma, examination and survey-----	278
Albany, Ga., up to, examination and survey-----	124
Dredge boat for (under Chattahoochee River)-----	867
Montezuma, Ga., to Old Agency, examination and survey-----	464
Improvement-----	230, 240, 257, 268, 287, 314, 343, 371, 404, 449, 500, 566, 628, 694, 770, 868, 979, 1093, 1236
Porter shoals, Ga., dam of Albany Power and Manufacturing Co.--	1214
Flint River, Mich.:	
Diversion to Saginaw River of unexpended balance of appropriation for improvement-----	1109
Examinations and surveys-----	716, 778
Improvement (under Saginaw River)-----	991
Floating of logs, rafts, etc., general provisions of law regarding-----	889 ²
	890 ² , 893, 908, 1010
Florence, Ala. <i>See</i> Tennessee River.	
Florida Canal. <i>See</i> Florida State.	
Florida, Cape, Entrance, Biscayne Bay, Fla. <i>See</i> Biscayne Bay.	
Florida East Coast Railway Company, construction of basin, etc., at Miami, Fla-----	960, 1236, 1237
Florida, State of:	
<i>See also</i> Transportation routes to the seaboard.	
Canal across, examinations and surveys-----	30, 54, 124, 245, 280, 328
Canal across, and thence along Gulf coast to Mississippi River, survey-----	245
Dredge-and-s snag boats for improvements in-----	501, 869, 961
Water hyacinths, removal of. <i>See</i> Water hyacinths.	
Flumes, mining, etc., in forest reserves, rights of way-----	1063
Flushing Bay, N. Y.:	
Channel to Newtown Creek, examination-----	795
Examinations and surveys-----	278, 1017
Improvement-----	294,
	315, 334, 361, 397, 437, 486, 548, 614, 680, 747, 954, 1084, 1224
Fog signals, under the Light-House Board-----	1182
Folger, Samuel B., relief of-----	104
Follets Pass, Tex., waterway from Galveston Bay to Brazos River, via. <i>See</i> Galveston Bay and Harbor.	
Fond du Lac, Minn. <i>See</i> Duluth-Superior Harbor and St. Louis River.	
Fond du Lac River, Wis.:	
<i>See also</i> Fox River.	
Improvement-----	318
Foot, Gervis, relief of-----	104
Ford, Ky. <i>See</i> Kentucky River.	
Foreign-built dredges, restriction on use of, in U. S.; documenting of certain, authorized-----	1163

Foreign (insular) possessions. <i>See</i> Guam, Hawaiian, and Philippine islands, Porto Rico, and San Luis d'Apra and Welles harbors.	Page.
Fore River, Portland, Me. <i>See</i> Portland Harbor.	
Fore (Weymouth) River, Mass. <i>See</i> Weymouth River.	
Forest reserves, rights of way for dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals for mining, etc., purposes	1063
Forestville Harbor, Mich., examinations and surveys	466, 522
Forked Deer River, Tenn.:	
Examination and survey (limits not defined)	1020
Improvement	381, 408, 453, 505, 571, 633, 775 ² , 875, 987, 1101, 1247
North (or Middle) Fork, examination and survey	327, 468
North (or Middle) Fork and main stream, examinations and surveys	219, 724, 802
South Fork, examinations and surveys	327, 1279
Forked River, N. J., examination and survey up to town of Forked River	1276
Fort Brown, Tex. <i>See</i> Rio Grande River.	
Fort Covington, N. Y. <i>See</i> Salmon River (tributary of the St. Lawrence).	
Fort Crockett, Galveston, Tex. <i>See</i> Galveston Bay and Harbor.	
Fort Gibson, Ind. T. <i>See</i> Arkansas River.	
Fort Hamilton channel, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Fortifications. <i>See</i> Forts.	
Fort Keogh, Mont. <i>See</i> Tongue River.	
Fort Leavenworth, Kans. <i>See</i> Missouri River.	
Fort Madison Harbor, Iowa. <i>See</i> Mississippi River.	
Fort Mifflin, Pa. <i>See</i> Delaware Bay and River.	
Fort Morgan, Ala. <i>See</i> Mobile Bay, Harbor, and River.	
Fort Niobrara Military Reservation, Nebr., dam across Niobrara River.	1180
Fort Pierre, S. Dak. <i>See</i> Missouri River.	
Fort Point channel, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Fort Pond Harbor (Bay), N. Y., examinations and surveys	524, 646
Fort Porter, Buffalo, N. Y., waterworks tunnel under Black Rock Harbor and, to Lake Erie. <i>See</i> Buffalo Harbor.	
Fort Ross Cove, Cal., examination and survey	519
Forts, location of each work with reference to nearest, to be stated in annual reports	155, 164
Fort Smith, Ark. <i>See</i> Arkansas River.	
Foster, James H., payment to	330
Foulweather, Cape, Oreg., examination and survey	277
Fountain City, Wis. <i>See</i> Mississippi River.	
Four Channels, at the Narrows, Lake Champlain, N. Y. <i>See</i> Four Channels and Narrows, under Champlain Lake, and Whitehall Harbor.	
Fourche La Faive River, Ark. <i>See</i> Fourche Le Fevre River.	
Fourche Le Fevre River, Ark.:	
Examinations and surveys	195, 278, 643
Improvement	290, 315, 345, 373, 453, 570
Four Lakes, River of the, Wis., survey (under Rock River)	88
Fourmile bar, Ohio River, harbor of refuge. <i>See</i> Cincinnati, under Ohio River.	
Fox Islands Thoroughfare, Me. <i>See</i> North Haven Harbor.	
Fox River, Ill. and Wis. (tributary of Illinois River), dam of Fox River Navigable Waterway Association near McHenry, Ill.	995, 1259, 1260
Fox River, Iowa and Mo., survey for levee (under Egyptian levee)	784
Fox River, Wis. (tributary of Green Bay):	
Brothertown Harbor, improvement	1258
Calumet Harbor, examination and survey	649
Calumet Harbor, improvement	993, 1258
Calumet Harbor, survey for harbor of refuge (on east shore of Lake Winnebago)	779
Canal from Lake Winnebago to Rock River, survey	156
Depere, below, improvement	620, 757
Examinations and surveys, including connection with Wisconsin River	88, 156
Flashboards, use of, directed	779

	Page.
Fox River, Wis. (tributary of Green Bay)—Continued.	
Flowage damages, investigation and adjustment of, payment of judgments and awards, limitation as to bringing of suits, etc----	252,
283, 330, 331, 392, 426, 431, 432, 433, 434, 472, 473,	
474, 475, 476, 477, 535, 536, 599, 600, 654, 670 ² , 727	
Fond du Lac Harbor, examination and survey-----	528
Fond du Lac Harbor, improvement-----	573, 574, 635, 702, 1258
Green Bay and Mississippi Canal Company, acquisition of property and rights of-----	180, 201, 202
Green Bay Harbor. <i>See</i> Green Bay Harbor.	
Harbor of refuge, east shore of Lake Winnebago. <i>See</i> Calumet Harbor, <i>supra</i> , and Mud Creek and Stockbridge Harbor, <i>infra</i> .	
Improvement-----	89, 180, 201, 202, 212,
227, 236, 252, 260, 272, 283, 292, 318, 330, 331, 348, 375, 392, 409,	
426, 431, 432, 433, 434, 455, 472, 473, 474, 475, 476, 477, 508 ² , 535,	
536, 573, 599, 600, 635, 654, 670 ² , 702, 727, 779 ² , 878, 993, 1111, 1258	
Improvement, including canal (Portage) to Wisconsin River, grant to State of land in aid of-----	110, 114, 127, 130, 137, 166
Kaukauna, protection wall, examination-----	649
Lands and materials needed in improvements may be taken and used therefor-----	252
Miller Bay harbor of refuge, improvement-----	993
Mud Creek, harbor of refuge, survey (on east shore of Lake Winnebago)-----	779
Payment to laborers employed under Day, Call & Co., contractors--	391
Property and rights of U. S., investigation of character and limitations, with description, regarding-----	779
Purchase of real estate required for right of way or for flowage----	227
Stockbridge Harbor, examination and survey-----	649
Stockbridge Harbor, improvement of harbor of refuge----	779, 878, 993, 1258
Stockbridge Harbor, survey for harbor of refuge (on east shore of Lake Winnebago)-----	779
Transportation route to the seaboard, survey-----	233
Winnebago Lake, survey for purposes of charting-----	1133
Fox River Navigable Waterway Association. <i>See</i> Fox River, Ill. and Wis.	
Foys flats, Trent River, N. C. <i>See</i> Trent River.	
Frankford Creek, Pa.:	
Examination and survey-----	352
Improvement-----	379, 691
Frankfort Harbor, Me. <i>See</i> Marsh River.	
Frankfort (Aux Becs Scies) Harbor, Mich., improvement-----	153.
161, 171, 175, 176, 177, 182, 191, 202, 212, 227, 237, 255, 272, 292,	
312, 336, 364, 400, 441, 491, 553, 619, 685, 756, 857, 968, 1108, 1252	
Franklin, La.:	
Waterway to Mermentau River, examination and survey, in connection with route from the Rio Grande to the Mississippi (<i>see also</i> Rio Grande River)-----	1127
Waterway to Mermentau River, improvement-----	1242
Franklin, Va., waterway to Cape Charles, examination-----	720
Frederica River, Ga., examination and survey-----	1013
Fredericksburg, Va. <i>See</i> Rappahannock River.	
Freedom, Pa. <i>See</i> Ohio River.	
Freeport, Me. <i>See</i> Harraseeket River.	
Freeport, N. Y. <i>See</i> Freeport Creek.	
Freeport Creek, N. Y.:	
Channel connecting Great South Bay with Freeport, on, examination-----	646
Channel to, examination and survey-----	1277
Freeport (Harraseeket) River, Me. <i>See</i> Harraseeket River.	
Freight statistics. <i>See</i> Commerce.	
Fremont, Ohio. <i>See</i> Sandusky Harbor and River.	
French Broad River, N. C. and Tenn.:	
Examinations and surveys-----	186, 235, 244, 245, 875
Improvement-----	257, 268, 287, 313, 322, 342,
345, 370, 374, 408, 453, 505, 571, 633, 699, 775, 874, 986, 1103, 1248	

French Island, Ohio River. <i>See</i> Ohio River.	Page.
Frenchs Beach Harbor, Me., examination and survey	645
Fresh Pond, Falmouth, Mass. <i>See</i> Falmouth Harbor.	
Fries, F. H., dam of	909
Frontberg (Troutberg) Harbor, N. Y. <i>See</i> Troutberg Bay.	
Front River, Ga. <i>See</i> Savannah Harbor.	
Fuca, Juan de, Strait, Wash. <i>See</i> Juan de Fuca Strait.	
Fulton, Ark.:	
<i>See also</i> Red River.	
Waterway to Shreveport, La., via Cypress Bayou and connecting lakes, etc., examination and survey	463, 465
Fund, surplus. <i>See</i> Appropriations and Surplus fund.	
Funds:	
<i>See also</i> Appropriations, Contracts, Estimates, Expenditures, etc., and Surplus fund.	
Receipts from various sources not paid into Treasury, annual statement regarding	1205
Fusillier Bayou, La., examination and survey	326

G.

Galena Harbor and River, Ill.:	
Examination and survey	218
Improvement by city of Galena; payment of consideration therefor by U. S.	574 ¹ , 575 ²
Improvement by U. S.	274, 290, 309, 336
Galien River, Mich. <i>See</i> New Buffalo Harbor.	
Gallipolis, Ohio. <i>See</i> Ohio River.	
Gallops Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Galveston and Brazos Canal, Tex.:	
Acquisition by U. S.	984
Waterway from Aransas Pass to West Galveston Bay at Brazos River and to Sabine Pass. <i>See</i> Brazos River.	
Waterway from Galveston Bay to Brazos River, via West Galveston Bay and. <i>See</i> Mouths of tributaries and Waterway, etc., under Galveston Bay and Harbor.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Galveston Bay and Harbor, Tex.:	
Bay, examinations and surveys	195, 262, 809
Bay, improvement, including Morgan Cut and Canal.	205,
234, 240, 243, 262, 268, 291, 315, 344, 373, 398,	
440, 490, 552, 585, 617, 684, 753, 806, 906	
Channel from inner bar to Fifty-first street, examination and survey	918
Channel from inner bar to Fifty-seventh street, examination and survey	1131
Channel from inner bar westward, diversion of improvement funds from appropriation for harbor	1099
Channel from inner bar westward, expenditure of improvement funds conditioned upon execution by city of bond in re conveyance to U. S. of Pelican Spit land.	1243
Channel from inner bar westward, improvement.	963, 1038, 1099, 1243
Chart of	809
Dredges, documenting of certain, of foreign construction	1163
Fort Crockett, etc., sea wall (protection of port and of U. S. property), examination and survey	963
Fort Crockett, etc., sea wall (protection of port and of U. S. property), improvement	1060, 1204
Galveston Island, erosion of easterly end, examinations and surveys	724, 802
Harbor, examinations and surveys	123, 165, 209, 262, 539, 809, 919, 1131
Harbor, improvement	184,
195, 205, 233, 242, 259, 265, 268, 288, 309, 335, 356, 363,	
440, 489, 552, 609, 656, 667, 669, 725, 729, 731, 737, 753,	
804, 809, 853, 963, 1038, 1058, 1098, 1202, 1243	

	Page.
Galveston Bay and Harbor, Tex.—Continued.	
Morgan Cut and Canal, acquisition by U. S.-----	291, 398, 585
Mouths of tributaries, improvement, including West Bay, Brazos River between Velasco and Richmond, mouth of Trinity River, Anahuac channel, Clear and Oyster creeks, Double, Turtle, Dickinson, Chocolate, Cedar, Bastrop, and East Bay bayous, and Galveston and Brazos Canal.-----	872, 984, 1099, 1244
Port Bolivar channel, examination and survey.-----	1132
Port Bolivar channel, improvement.-----	1244
Texas City channel, examination and survey.-----	1279
Texas City channel, improvement.-----	854, 963, 1244
Texas City channel, permanent indefinite appropriation for examination of contract work.-----	963, 964
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.*	
Waterway to Brazos River, via West Galveston Bay and Galveston and Brazos Canal, examinations and surveys (<i>see also</i> West Galveston Bay).-----	298, 796, 1127
Waterway to Brazos River, via West Galveston Bay and Galveston and Brazos Canal, improvement (<i>see also</i> Mouths of tributaries, <i>supra</i> , and Galveston and Brazos Canal and West Galveston Bay).-----	1244
Waterway to Houston (Galveston Bay ship channel, Buffalo Bayou, etc.), examinations and surveys.-----	186, 806
Waterway to Houston (Galveston Bay ship channel, Buffalo Bayou, etc.), improvement.-----	853 ² , 905 ⁴ , 984, 1040, 1059, 1099, 1202, 1245
Waterway to Sabine Lake, examination and survey (<i>see also</i> Waterway from the Rio Grande to Mississippi River, under Rio Grande River).-----	209
West Bay. <i>See</i> Mouths of tributaries and Waterway to Brazos River, <i>supra</i> , and West Galveston Bay.	
Garbage, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Gardiner, Me. <i>See</i> Kennebec River.	
Gardiners Bay, N. Y.:	
Examination and survey of channel between Threemile Harbor and.-----	1277
Examination and survey of Threemile Harbor (including connection with).-----	898
Garland, Ark., gauging. <i>See</i> Gauging, under Mississippi River.	
Garritsons Creek, Long Island, N. Y. <i>See</i> Dead Horse Inlet.	
Gary Harbor, Ind.:	
Examination and survey.-----	1273
Filling of Lake Michigan at, and construction of wharves, etc., by private parties.-----	1163
Gasconade River, Mo.:	
Examinations and surveys.-----	209, 298, 1276
Improvement.-----	321,
347, 378, 409, 457, 513, 578, 639, 705, 785, 881, 1000, 1001, 1115, 1263	
Gasparilla Sound, Fla., channel to Lemon Bay, examination and survey.-----	1012
Gatesville, N. C. <i>See</i> Bennetts Creek, or River.	
Gauging. <i>See</i> Columbia and Mississippi rivers.	
Gauley River, W. Va.:	
Examination and survey.-----	469
Improvement.-----	499, 563, 627, 693, 769
Gedney channel, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Genesee River, N. Y. <i>See</i> Charlotte Harbor.	
Geneva, Ohio. <i>See</i> Cowles Creek.	
George Lake, St. Marys River, Mich. <i>See</i> St. Marys River.	
George Lake, N. Y., examination and survey.-----	524
Georges Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Georges (St. George) River, Me.:	
Examinations and surveys.-----	465, 645, 722
Improvement.-----	762, 861, 973
Georgetown Harbor, D. C. <i>See</i> Alexandria Canal, Chesapeake and Ohio Canal, Commissioners of the District of Columbia, Harbor lines, and Potomac River.	

Georgetown Harbor, S. C.:	Page.
Examinations and surveys	78, 123, 325
Improvement	380, 398, 439, 488, 551, 616
Improvement, with funds appropriated for Winyah Bay	922, 958
Sampit River, including, examination and survey	899, 1020
Georgiana River, Cal., examination	714
Georgia, State of, tonnage duties for improving Savannah River	15,
	16 ³ , 17, 20 ² , 24
Gere, R. Nelson, relief of	199
Gibson, Fort, Ind. T. <i>See</i> Arkansas River.	
Gila River, Ariz. <i>See</i> Colorado River.	
Gillespie (dredge), maintenance of depths in Saugatuck, Pentwater, and White Lake harbors, Mich., sufficient to accommodate	1251, 1252
Gladstone Harbor, Mich.:	
Examination and survey	1016
Improvement	1107
Glasgow, Mo. <i>See</i> Glasgow and West Glasgow, under Missouri River.	
Glencove Harbor, Me., examination	716
Glencove Harbor, N. Y.:	
<i>See also</i> Hempstead Bay and Harbor.	
Examination and survey	468
Improvement	487, 549, 614, 680, 748, 954, 1084
Glen Island, New Rochelle Harbor, N. Y. <i>See</i> New Rochelle Harbor.	
Gloucester Harbor, Mass.:	
Examinations and surveys	186, 420, 645, 1275
Improvement	207, 436, 484, 546, 612, 678, 745, 845, 950, 1038, 1058, 1135, 1200
Squam (Annisquam) Harbor to, examination and survey	25
Squam (Annisquam) Harbor to, improvement	25
Vincent's Cove, examination	645
Goat Island, Newport, R. I. <i>See</i> Newport Harbor.	
Goat Island ledge (Pull-and-be-damned Point), Portsmouth Harbor, N. H. <i>See</i> Portsmouth Harbor.	
Godard, Thatcher, repair of pier in Kennebunk River, Me	17
Golconda, Ill. <i>See</i> Ohio River.	
Golden Gate, San Francisco Bay, Cal. <i>See</i> San Francisco Bay and Harbor.	
Gold mining in Bering Sea, Alaska	910, 911
Goodyear, C. P., improvement by, of Brunswick outer bar, Ga. <i>See</i> Brunswick Harbor.	
Goose Creek, S. C., dam of Charleston Light and Water Co	1175
Goose Lake, Oreg. and Cal., changing of level	1066
Goose Point channel, Plymouth Harbor, Mass. <i>See</i> Plymouth Bay and Harbor.	
Gordon Lake, Del., waterway via. <i>See</i> Rehoboth Bay.	
Gordons Landing Harbor, Lake Champlain, Vt.:	
<i>See also</i> Champlain Lake.	
Improvement	435, 484
Goshen Creek, N. J.:	
Examination and survey	593
Improvement	625, 690, 765, 863
Gosport, Ind. <i>See</i> White River.	
Gosport, N. H. <i>See</i> Isles of Shoals.	
Government funds:	
<i>See also</i> Appropriations, Contracts, Estimates, Expenditures, etc., and Surplus fund.	
Receipts from various sources not paid into Treasury, annual statement regarding	1205
Government property. <i>See</i> Materials, Property, and Structures.	
Governors Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Governors Island, New York Harbor, N. Y. <i>See</i> Gowanus Bay, Canal, and Creek and New York Bay and Harbor.	
Gowanus Bay, Canal, and Creek, N. Y.:	
Anchorage grounds. <i>See</i> New York Bay and Harbor.	
Bay, examinations and surveys	327, 592
Bay, improvement	334, 361, 397, 437, 486, 548
Bay Ridge channel, examinations and surveys	592, 800, 1130

Gowanus Bay, Canal, and Creek, N. Y.—Continued.		Page.
Bay Ridge channel, improvement	548, 614, 680,	
748, 809, 828, 848, 928, 941, 1025, 1037, 1057, 1134, 1199, 1225, 1291		
Buttermilk channel. <i>See</i> Buttermilk channel.		
Canal, improvement		748
Creek, construction of bulkhead by estate of J. P. Robinson		748
Creek, examinations and surveys		384, 801
Creek, improvement	614, 680, 748,	848, 954
Creek, to Fort Hamilton (at The Narrows), width of piers, and filling of same with solid materials, between pierhead and bulkhead lines		748
Red Hook channel, improvement	614, 680,	
748, 809, 828, 848, 928, 941, 1025, 1037, 1057, 1134, 1199, 1225, 1291		
Red Hook channel, survey		800
Triangular area between Bay Ridge and Red Hook channels, improvement	748, 809, 828	
Triangular area between Bay Ridge and Red Hook channels, survey		800
Grand Caillou Bayou, La., examination and survey		326
Grand Calumet River, Ill. and Ind. <i>See</i> Calumet Harbor and River.		
Grand Chain, Ohio River. <i>See</i> Ohio River.		
Grand Detour, Ill. <i>See</i> Rock River.		
Grande, Boca, Fla. <i>See</i> Charlotte Harbor.		
Grande, Rio, Tex. <i>See</i> Rio Grande River.		
Grand Gulf Harbor, Miss. <i>See</i> Mississippi River.		
Grand Haven Harbor, Mich.:		
Channel to Spring Lake, improvement		967
Improvement		122,
153, 161, 176, 177, 182, 191, 202, 212, 228, 255, 272, 292, 310,		
336, 365, 400, 441, 491, 553, 619, 685, 756, 857, 967, 1107, 1252		
Grand Isle, Lake Champlain, Vt. <i>See</i> Gordons Landing Harbor.		
Grand Lake (part of Atchafalaya River), La. <i>See</i> Atchafalaya and Grand rivers and Charenton Canal.		
Grand Lake (part of Mermentau River), La. <i>See</i> Mermentau River.		
Grand Marais Harbor, Mich.:		
Examination and survey		196
Improvement		320, 336,
365, 400, 441, 491, 553, 619, 686, 756, 857, 925, 968, 1107, 1251		
Grand Marais Harbor, Minn.:		
Examinations and surveys	235, 1016, 1275	
Improvement		295, 311,
338, 366, 401, 443, 493, 555, 621, 688, 759, 860, 970, 1111, 1258		
Grand Pass, La., to New Orleans. <i>See</i> Barataria Bay and Barataria Ship Canal.		
Grand Portage Bay, Minn., examination and survey		353
Grand Portage Indian Reservation, Minn., improvement of Pigeon River along		942
Grand Rapids, Mich. <i>See</i> Grand River.		
Grand Rapids, Minn. <i>See</i> Mississippi River.		
Grand rapids, Wabash River, Ind. <i>See</i> Wabash River.		
Grand Rapids Water Power and Boom Company		839, 906
Grand River, La.:		
Examinations and surveys. <i>See</i> Grand Lake (route to Bayou Plaquemine), under Atchafalaya River.		
Improvement (under Plaquemine Bayou)	632, 697, 773, 1097, 1241	
Removal of water hyacinths. <i>See</i> Water hyacinths.		
Grand River, Mich.:		
<i>See also</i> Grand Haven Harbor.		
Examination with view to regulating floods		1253
Examinations and surveys	327, 466, 523, 591	
Improvement	337, 375, 408, 778, 878, 993, 1108, 1253	
Grand River, Mo.:		
Above Brunswick, declared not navigable		1067
Examinations and surveys		327, 523

	Page.
Grand River, Ohio :	
<i>See also</i> Fairport Harbor.	
Canal via (Lake Erie and Ohio River Ship Canal)-----	1207
Examination and survey between Richmond and the mouth-----	593
Grand Traverse Bay, Mich., examination and survey for connection with Torch Lake, near Eastport-----	466
Grand View, N. Y. <i>See</i> Hudson River.	
Grant River, Wis., grant to State of land for improvement at Potosi---	101
Grant Slue (River), Wis. <i>See</i> Grant River.	
Grass River, N. Y. :	
Canal of St. Lawrence Power Co. to St. Lawrence River-----	975
Examinations and surveys-----	327, 916
Improvement-----	380, 495, 559, 728
Grassy Sound, N. J., Thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Gravel. <i>See</i> Deposits and Excavations.	
Gravesend Bay, N. Y., examination and survey-----	718
Graveyard Point, Port Orford, Oreg. <i>See</i> Port Orford Harbor.	
Grays Harbor, Wash. :	
Canal to Puget Sound, examination and survey-----	1280
Examinations and surveys-----	355, 595, 724, 1132
Improvement-----	622, 688, 761, 811, 841, 927, 940, 972, 1025, 1117 ² , 1266, 1267
Transfer of Government plant belonging to mouth of Columbia River-----	761, 762
Grays River, Wash. :	
Examinations and surveys-----	595, 596
Improvement-----	1267
Grayville, Ill. <i>See</i> Wabash River.	
Great Bay, N. J. :	
Examination and survey-----	593
Sound between Barnegat Bay and Great Egg Bay. <i>See</i> Barnegat Bay, Harbor, and Inlet.	
Thoroughfare, etc., to Cape May, examinations and surveys-----	467, 593
Great Bay, N. H., examination and survey-----	388
Great Brewster Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Great Britain. <i>See</i> Canada.	
Great Cacapon River, W. Va., examination and survey-----	528
Great Chazy River, N. Y. :	
Examination and survey-----	528
Improvement-----	559, 624, 690
Great Choptank River, Md. <i>See</i> Choptank River.	
Great Diamond Island, Portland Harbor, Me. <i>See</i> Portland Harbor.	
Great Egg Bay, N. J. :	
Sound between Barnegat Bay and, examination and survey-----	593
Thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Great Falls, Missouri River, Mont. <i>See</i> Missouri River.	
Great Harbor, Culebra Island, P. R. :	
<i>See also</i> Porto Rico.	
Examination and survey-----	1133
Great Harbor, Woods Hole, Mass. <i>See</i> Woods Hole Harbor and channel.	
Great (Winthrop) Head, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Great Kanawha River, W. Va. <i>See</i> Kanawha River.	
Great Lakes. <i>See</i> Northern and Northwestern Lakes and each par- ticular lake.	
Great Miami River, Ohio. <i>See</i> Miami River, under Ohio River.	
Great Peconic Bay, N. Y. <i>See</i> Peconic Bay.	
Great Pedee River, S. C. :	
Examinations and surveys-----	219, 279, 300, 918, 1270
Improvement-----	322, 343, 371, 404, 448, 500, 565, 628, 694, 770, 867, 979, 1039, 1059, 1091, 1135, 1234, 1292
Great Salt Pond, Block Island, R. I. <i>See</i> Block Island.	
Great (Big) Sodus Bay Harbor, N. Y. :	
Improvement-----	48, 52, 56, 59, 64, 67, 71, 74, 80, 85, 100, 123, 153, 162, 183, 204, 229, 238, 255, 273, 293, 308, 334, 361, 397, 437, 486, 549, 614, 680, 749, 847, 954, 1226
Survey of harbors between Genesee and Oswego rivers, including---	43

	Page.
Great South Bay, N. Y.:	
Channel connecting Freeport with, examination.....	646
Channel from Jamaica Bay to Peconic Bay, through, examination and survey.....	1277
Examinations and surveys (Fire Island Inlet to Patchogue, on Patchogue River).....	899, 916
Improvement (Fire Island Inlet to Patchogue, on Patchogue River).....	955, 1085, 1224
Great Wicomico River, Md. (on western shore). <i>See</i> Wicomico River.	
Great Wicomico River, Va. (Northumberland County), examinations and surveys.....	388, 595, 720
Great Woods Hole Harbor, Mass. <i>See</i> Woods Hole Harbor and channel.	
Green and Barren River Navigation Company. <i>See</i> Barren and Green rivers.	
Green Bay (arm of Lake Michigan), Wis. <i>See</i> Sturgeon Bay and Lake Michigan Canal.	
Green Bay and Lake Michigan Ship Canal, Wis. <i>See</i> Sturgeon Bay and Lake Michigan Canal.	
Green Bay and Mississippi Canal, Wis. <i>See</i> Fox and Wisconsin rivers.	
Green Bay and Mississippi Canal Company, acquisition of property and rights of.....	180, 201, 202
Green Bay Harbor, Fox River, Wis.:	
Examinations and surveys.....	649, 901
Improvement.....	154,
162, 171, 175, 176, 177, 181, 190, 212, 227, 236, 255, 270, 292, 310, 337, 365, 400, 442, 492, 554, 620, 687, 757, 818, 858, 969, 1111, 1258	
Greenbrier River, W. Va., examination and survey.....	423
Green, David M., payment to.....	330
Greene, B. D., relief of.....	728
Green, Harvey S., dams of.....	1077, 1217
Green Jacket shoal, Providence River, R. I. <i>See</i> Providence Harbor and River.	
Greenleaf bend, Mississippi River. <i>See</i> Beechridge, under Mississippi River.	
Greenport Harbor, N. Y.:	
Examinations and surveys.....	354, 718
Improvement.....	380, 397, 437, 486, 549, 614
Green River, Ky.:	
Acquisition by U. S. of rights, etc., of Green and Barren River Navigation Company.....	419, 453, 505
Examinations and surveys.....	299, 588, 798, 895, 1127
Examination and survey for dam in Ohio River to increase depth in.....	1013
Improvement.....	634, 670, 700 ² , 776, 875, 988, 1103
Leases for use of surplus water, and of land for mill sites; itemized statements of moneys received to accompany annual reports.....	572
Green River, N. C., examination and survey.....	422
Greenville Harbor and reach, Miss. <i>See</i> Mississippi River.	
Greenwich Bay and Cove, R. I. <i>See</i> Greenwich Harbor.	
Greenwich Harbor, Conn.:	
Examination and survey.....	714
Improvement.....	747, 954, 1084, 1224
Greenwich (East Greenwich) Harbor, Greenwich Bay, R. I.:	
Harbor (Greenwich Bay and Cove), examination and survey.....	648
Long Point bar, examination and survey.....	527
Long Point bar, improvement.....	547
Greenwich Point, Delaware River, Philadelphia, Pa. <i>See</i> Philadelphia, under Delaware Bay and River.	
Gregg shoals, Savannah River, Ga. and S. C. <i>See</i> Savannah Harbor and River.	
Griffin Lake, Fla. <i>See</i> Oklawaha River.	
Griffith, G. C., payment to.....	654, 670
Grossepont channel, Lake St. Clair, Mich. <i>See</i> St. Clair Lake.	
Grossetete Bayou, La.:	
Examinations and surveys.....	793 1015
Removal of water hyacinths. <i>See</i> Water hyacinths.	

Guadalupe River, Tex.:	Page.
Channel from Aransas Pass to Victoria, improvement.....	1244
Channel from Aransas Pass to Victoria and Cuero, survey.....	1127
Examinations and surveys.....	235, 527, 719, 1021
Guam Island, Mariana Islands, survey for harbor.....	924
Guaranties. <i>See</i> Bonds.	
Guild, J. C., construction of Scott Point (Hales bar) lock and dam, Tennessee River.....	1050, 1062
Guilford, Conn. <i>See</i> Falkners Island Harbor.	
Gulf of Mexico. <i>See</i> Mexico, Gulf of.	
Gulfport Harbor, Miss.:	
Channel, etc., to Ship Island Harbor, application, to dredge boat for Mississippi coast, of improvement funds for.....	1240
Channel, etc., to Ship Island Harbor, examinations and surveys with view to improvement.....	522, 795, 799, 827, 1129
Channel, etc., to Ship Island Harbor, improvement and maintenance under contract, etc.....	852, 1026, 1058, 1177, 1240, 1291
Channel, etc., to Ship Island Harbor, payments to Spencer S. Bullis, and annulment of contract.....	1177, 1240
Channel, etc., to Ship Island Harbor, surveys to determine work done by contractor.....	852
Channel, etc., to Ship Island Harbor, wharfage, etc., charges to be approved by Secretary of War.....	1177, 1178
Gulf States, removal of water hyacinths. <i>See</i> Water hyacinths.	
Gull Lake, Minn., reservoir. <i>See</i> Reservoirs, under Mississippi River.	
Gull River Lumber Company.....	1067
Guntons Cove, Va. <i>See</i> Pohick Creek, under Potomac River.	
Gunters Creek, Ala., examination and survey.....	586
Guntersville, Ala. <i>See</i> Tennessee River.	
Gurnet rock, Plymouth Harbor, Mass. <i>See</i> Plymouth Bay and Harbor.	
Guttenberg, Iowa. <i>See</i> Mississippi River.	
Gut, The, Lake Champlain, Vt. <i>See</i> North and South Hero islands, under Champlain Lake.	
Gut, The, Sasanoa River, Me. <i>See</i> Sasanoa River.	
Guyandot River, W. Va.:	
Examinations and surveys.....	234, 720, 901, 1280
Improvement.....	273, 291, 313, 342, 370, 403, 447, 497, 563, 627, 693, 769, 866

H.

Hackensack River, N. J., examinations and surveys.....	525, 593
Haines, H. W., dam of.....	1167
Hales bar (Scott Point) lock and dam, Tennessee River. <i>See</i> Tennessee River.	
Halifax River, Fla., improvement of communication between Indian River and (<i>see also</i> Haulover Canal).....	36
Hallowell, Me. <i>See</i> Kennebec River.	
Hamburg Bay, Ill. <i>See</i> Mississippi River.	
Hamburg Cove (Eightmile River), Conn., examination and survey.....	1272
Hamilton, Ill. <i>See</i> Hamilton Slough, under Mississippi River.	
Hamilton, Fort, channel, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Hamilton Slough, Mississippi River, Ill. <i>See</i> Mississippi River.	
Hammonasset River, Conn. <i>See</i> Clinton Harbor.	
Hammond, Ind. <i>See</i> Calumet Harbor and River.	
Hammond Bay, Lake Huron, Mich., examination.....	646
Hampton Creek, or River, Va.:	
Examinations and surveys.....	234, 527
Improvement.....	273, 287, 563
Hampton Harbor and River, N. H., examinations and surveys.....	523, 1017
Hampton River, or Creek, Va. <i>See</i> Hampton Creek, or River.	
Hampton Roads, Va.:	
Anchorage grounds in, and adjacent waters, establishment of (during continuance of Jamestown Exposition).....	1151
Jamestown Exposition grounds, construction of piers, and dredging to and between the same.....	1199
Middle Ground bar, examination and survey.....	901
Middle Ground bar, improvement.....	957, 1038, 1231

Handkerchief shoal, Mass., examination for harbor of refuge (under Vineyard and Nantucket sounds)-----	Page. 953
Handsboro, Miss. <i>See</i> Bernard Bayou.	
Hannegan, John, relief of-----	197
Hannegan, William, relief of-----	197
Hannibal, Mo. <i>See</i> Mississippi River.	
Hannibal and St. Joseph Railroad Company, payment to-----	538
Hannibal Ferry Company, payment to-----	637
Hanover, Mass. <i>See</i> Scituate Harbor.	
Harbor Beach (Sandbeach), Mich., harbor of refuge:	
Examinations and surveys-----	186, 1108
Improvement-----	191, 203, 212, 228, 237, 260, 272, 293, 310, 337, 357, 365, 400, 442, 491, 554, 619, 686, 756, 857, 930, 966, 1058, 1108, 1253
Regulations for government of; appointment, duties, etc., of custodian; control of works before and after completion-----	357
Harbor Cove, Gloucester, Mass. <i>See</i> Gloucester Harbor.	
Harbor lines:	
Compensation for displacement of tidewater by structures or deposits beyond-----	713, 887 ² , 890, 893, 906 ² , 1010
District of Columbia, to be determined by Chief of Engineers and Commissioners of, and approved by Secretary of War-----	903, 904
Establishment, etc., of, funds applicable for payment of expenses incurred prior to March 3, 1905, when not derived from appropriations for improvement, etc., at the localities affected. <i>See</i> Examinations and surveys.	
Establishment, etc., of, funds applicable for payment of expenses incurred subsequent to March 3, 1905-----	1123
Establishment of; general provisions of law regarding-----	462, 518, 584, 887 ² , 890, 893, 906 ² , 1010
Use of appropriations for dredging inside of, prohibited-----	643
Harbors and rivers. <i>See</i> Navigable waters and Rivers and harbors.	
Harlem (Bronx) Kills, N. Y. <i>See</i> Harlem River.	
Harlem River, N. Y.:	
Bridges, modification of certain; regulations governing the opening and closing of draws, including draw of bridge at mouth of Spuyten Duyvil Creek, and height, etc., of pilot houses, flag poles, and smokestacks of tugboats-----	558, 559, 763, 764
Bronx (or Harlem) Kills to East River, examinations and surveys-----	352, 1018
Improvement, including Spuyten Duyvil Creek-----	231, 243, 275, 297, 495, 558, 624, 690, 763, 863, 974, 1086, 1227
Near East River, examination and survey-----	218
Randalls Island, via Spuyten Duyvil Creek, to Hudson River, examination and survey-----	235
Transfer of land to Edward J. Farrell-----	1067
Harlingen, Tex. <i>See</i> Arroyo Colorado.	
Harlowe Creek, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examination and survey-----	388
Harpers Ferry, W. Va., right of way of Winchester and Potomac R. R. Co-----	65
Harraseeket River, Me.:	
Examinations and surveys-----	353, 523, 798
Improvement-----	557, 623, 689
Harris Creek, Va., examination-----	720
Harrisons bar, James River, Va. <i>See</i> James River.	
Harrisonville Harbor, Ill. <i>See</i> Mississippi River.	
Harris Slough (outlet or mouth of Galena River), Ill. <i>See</i> Galena River.	
Hartenstein, Herman L., dam of-----	1287
Hartford, W. Va. <i>See</i> Ohio River.	
Hartford and New York Steamboat Company, payment to-----	283
Hartford and New York Transportation Company, payments to-----	425 ² , 427, 535
Harwich, Mass. <i>See</i> Herring River and Salt Pond.	
Haskell, John C., relief of-----	98
Haskell, Josiah, relief of-----	113
Hatchee (Big Hatchee) River, Tenn.:	
Examinations and surveys-----	1020, 1279
Improvement-----	321, 345, 374, 407, 453, 505, 570, 633

	Page.
Hat Slough, Wash. <i>See</i> Puget Sound and tributaries.	
Hattons Ford, Savannah River, Ga., and S. C. <i>See</i> Savannah Harbor and River.	
Haulover Canal (Indian River to Mosquito Lagoon), Fla. :	
Examinations and surveys-----	354, 386
Improvement-----	36, 103, 124
Waterway from St. Johns River to Jupiter Inlet and Lake Worth, via. <i>See</i> St. Johns River.	
Havens Anchorage, Cal. <i>See</i> Fishrock Harbor.	
Haverhill, Mass. <i>See</i> Merrimac River.	
Havre de Grace, Md. <i>See</i> Susquehanna River.	
Hawaiian Islands. <i>See</i> Hilo, Honolulu, and Pearl harbors.	
Hay (West) Harbor, Fishers Island, N. Y. <i>See</i> West (Hay) Harbor.	
Hay Lake channel, St. Marys River, Mich. <i>See</i> St. Marys River.	
Hayward, Charlotte G., payment to administrator of, etc-----	1218
Hayward, Columbus F., payment to executor of, etc-----	1218
Hayward, Edwin T., payments to, etc-----	1218
Heavens (Havens) Anchorage, Cal. <i>See</i> Fishrock Harbor.	
Helena, Ark. <i>See</i> Mississippi River.	
Hell Gate, East River, N. Y. <i>See</i> East River.	
Hellgate River, Mont., examinations and surveys of Clark Fork River, including-----	591, 592
Hempstead Bay, N. Y. (south shore of Long Island) :	
Channel connecting Freeport with Great South Bay. <i>See</i> Freeport.	
Channel connecting Jamaica and Peconic bays. <i>See</i> Jamaica Bay.	
Channel from Pearsall's dock to Flat Creek, examination and survey-----	387
Woodsburg Channel, examination-----	718
Hempstead Bay and Harbor, N. Y. (north shore of Long Island) :	
Examinations and surveys-----	326, 718, 1277
Glencove Harbor. <i>See</i> Glencove Harbor.	
Roslyn Harbor. <i>See</i> Roslyn Harbor.	
Henderson Harbor, Ohio River, Ky. <i>See</i> Ohio River.	
Henderson, Henry T., dam of-----	1212
Hendersons Point, Portsmouth Harbor, Me. and N. H. <i>See</i> Portsmouth Harbor.	
Hendricks Harbor, Me., examination and survey-----	1128
Hennepin Canal, Ill. <i>See</i> Illinois and Mississippi Canal.	
Hermann, Mo. <i>See</i> Missouri River.	
Heron, Pass au, Ala. <i>See</i> Dauphin Island-Cedar Point shoal, under Mobile Bay, Harbor, and River.	
Herring River, Mass., examination and survey-----	794
Herr Island lock and dam, Allegheny River, Pa. <i>See</i> Allegheny River.	
Hertford, N. C. <i>See</i> Perquimans River.	
Hickman Harbor, Ky. <i>See</i> Mississippi River.	
Highland Bayou, Tex., examination and survey-----	900
Hillsboro Bay and River, Fla. <i>See</i> Tampa Bay and Harbor.	
Hillsboro (steamer), payment to Independent Line Steamers for damage to steamer <i>Manatee</i> by-----	1028, 1071, 1072
Hilo Harbor, Hawaii :	
Examination and survey-----	1133
Improvement-----	1269
Hingham Harbor, Mass. :	
Examinations and surveys-----	235, 420
Improvement-----	242, 436, 484, 547, 612, 1221
Hiring of labor. <i>See</i> Employees, Labor, etc.	
Hiring of private dredging plants, payment for, in customary manner or on reimbursement and percentage basis-----	1281
Hiring or leasing of public property. <i>See</i> Leases and Property.	
Hiwassee River, Tenn. :	
Examinations and surveys-----	234, 648, 900, 1020
Improvement-- 257, 270, 291, 315, 345, 374, 408, 453, 505, 571, 987, 1103, 1248	
Waterway from Tennessee River to Savannah River, via, examination and survey-----	326
Hoboken, N. J. <i>See</i> New York Bay and Harbor.	

Hocking (Big Hockhocking) River, Ohio :	Page.
Examination and survey	468
Harbor of refuge at or near mouth. <i>See</i> Ohio River.	
Improvement	506
Hodgkins Cove, Ipswich Bay, Mass., examination and survey	219
Hogs Back, Sacramento River, Cal. <i>See</i> Sacramento River.	
Holbrook, John B. (under Stubbs & Lackey)	603
Holland (Black Lake) Harbor, Mich. :	
Examination and survey	800
Improvement	122,
154, 161, 182, 191, 203, 212, 228, 237, 258, 272, 292, 309, 336, 364, 399.	
442, 491, 554, 619, 686, 756, 857, 925, 967, 1107, 1202, 1252, 1293	1293
Holm (dredge), documenting of, as a vessel of the U. S.	1163
Holmes Creek, or River, Fla. <i>See</i> Holmes River, or Creek.	
Holmes, Elisha H., relief of	98
Holmes Hole Harbor, Mass., survey	30
Holmes River, or Creek, Fla. :	
Examination and survey	326
Improvement	103, 501, 567, 869, 1095, 1238
Holston River, Tenn. and Va. :	
Examinations and surveys	325, 423, 900
Improvement	987, 1248
Holyoke, Mass. <i>See</i> Connecticut River.	
Home City, Ohio. <i>See</i> Lock and Dam 37, under Ohio River.	
Hommacks, the, Md., examination and survey at, for inlet into the Atlantic	209
Homochitto River, Miss. :	
Examinations and surveys	421, 646, 794, 1276
Improvement	871, 983, 1097, 1240
Homosassa Bay and River, Fla. :	
Bay, examination and survey	418
River, examination and survey	519
Honolulu Harbor, Hawaii :	
Examinations and surveys	1120, 1121
Improvement	1120, 1202, 1269
Quarantine Island, reclamation	1142
Hood Canal, Wash., channel to North Bay (Cases Inlet), examination ..	720
Hookton, Cal. <i>See</i> Humboldt Bay and Harbor.	
Hoquarten Slough, Oreg. <i>See</i> Tillamook Bay.	
Hoquiam, Wash. <i>See</i> Grays Harbor.	
Horn Harbor, Va., examination and survey	1280
Horn Island Harbor and Pass, Miss. :	
Dredge boat for harbors and adjacent channels on coast of Mississippi ..	1240
Harbor, improvement	870, 930
Harbor and pass, examinations and surveys	799, 824
Pass, examinations and surveys	354, 717, 1017
Pass, improvement (sometimes under Pascagoula River)	406,
450, 696, 772, 1096, 1240	
Horn River, N. Y., examination and survey of channel to Peters Neck Point, through Peters Neck (Long Beach) Bay	1277
Horseshoe shoals, Delaware River. <i>See</i> Delaware Bay and River.	
Hortons Point, N. Y., examination and survey for breakwater	422
Hospital Point, Norfolk Harbor, Va. <i>See</i> Norfolk Harbor.	
Hotchkiss, Robert H., payment to	283
Housatonic River, Conn. :	
Examinations and surveys	185, 797
Improvement	194, 207, 217, 232, 241,
276, 311, 339, 367, 402, 445, 494, 558, 623, 690, 763, 862, 974, 1084, 1224	
House of Representatives. <i>See</i> Congress and Documents.	
Houston, Tex. <i>See</i> Buffalo Bayou and Galveston Bay and Harbor.	
Howard, Lyon &, payment to	92, 130
Hubbard, Henry, relief of	138
Hudson Harbor, Fla., examination and survey	894
Hudson Harbor, Wis. <i>See</i> St. Croix River and Lake.	

	Page.
Hudson River, N. Y.:	
Anchorage grounds, establishment, etc., of.....	480
Channel to Upper Nyack, Nyack, South Nyack, Grand View, Piermont, through the (stone) pier, to mouth of Sparkill River, and thence to main channel, examination and survey.....	1277
Cornwall, from Moodna Creek, or River, to deep water in, examination and survey.....	592
Coxsackie to Albany, gorges and freshets, investigation regarding..	974
Coxsackie to New Baltimore, examination and survey.....	467
Coxsackie to Troy, examination and survey.....	592
Deep waterway from Great Lakes to Atlantic Ocean, via. <i>See</i> Northern and Northwestern Lakes.	
Deep waterway to the Great Lakes, examination and survey.....	795
Improvement..... 69, 74, 81, 86, 119, 145, 152, 162, 171, 175, 176, 177, 183, 193, 206, 217, 231, 241, 258, 276, 285, 312, 339, 367, 402, 445, 495, 558, 592, 593, 624, 668, 669, 725, 731, 804, 809, 828, 862, 929, 941, 974, 1086, 1227	
New York Harbor. <i>See</i> New York Bay and Harbor.	
New York to Albany, examination and survey.....	592
New York to Troy, examination and survey.....	592
North River. <i>See</i> New York Bay and Harbor.	
Nyack Harbor. <i>See</i> Channel to Upper Nyack, <i>supra</i> , and Nyack Harbor.	
Peekskill Harbor. <i>See</i> Peekskill Harbor.	
Piermont, examination and survey of stone pier (<i>see also</i> Channel to Upper Nyack, etc., <i>supra</i>).....	1086
Rondout Harbor. <i>See</i> Rondout Creek and Harbor.	
Saugerties Harbor. <i>See</i> Saugerties Harbor.	
Stonehouse bar, opposite New Baltimore, removal of.....	1086
Stuyvesant Harbor, shoal off. <i>See</i> Stuyvesant Harbor.	
Tarrytown Harbor. <i>See</i> Tarrytown Harbor.	
Troy to mouth of Champlain Canal at Waterford, examination and survey.....	422
Troy to Waterford, examination and survey.....	1130
Hughes, Charles H., et al., dam of.....	1140
Hugh McGlincy and Company, payment to assignee of.....	214
Hugh MacRae Company:	
Dam across Savannah River at Calhoun Falls, Ga. and S. C.....	1285
Dam across Savannah River at Cherokee shoals, Ga. and S. C.....	1287
Dam across Savannah River at Hattons Ford, Ga. and S. C.....	1286
Dam across Savannah River at Trotters shoals, Ga. and S. C.....	1287
Hull, Mass. <i>See</i> Boston Harbor.	
Hulls Creek, Va., examinations and surveys.....	388, 527
Humboldt Bay and Harbor, Cal.:	
Examinations and surveys, including channels in front of Eureka, Arcata, and Hookton.....	195, 280, 329, 793, 824, 1125, 1272
Improvement.....	338,
366, 401, 443, 493, 555, 621, 669 ² , 733, 805, 809, 828, 840, 860, 1265	
Humptulips River, Wash., examination and survey.....	386
Hunters Creek, Va., examination and survey.....	469
Hunting Creek, Va. (Accomac County), examinations and surveys.....	388, 720
Hunting Creek, Va. (Fairfax County):	
Examination and survey.....	528
Examination and survey, and thence across Potomac River to Maryland shore.....	1021
Huntington Bay, N. Y.:	
Channel to Lloyds and Cold Spring harbors, examination and survey.....	1130
Channel between Lloyds Harbor and Cold Spring Bay, examination and survey.....	328
Channel from Oyster Bay and Lloyds Harbor to Cold Spring Bay, examination.....	795
Huntington Harbor. <i>See</i> Huntington Harbor.	
Northport Harbor. <i>See</i> Northport Harbor.	
Huntington Harbor, N. Y.:	
<i>See also</i> Huntington Bay.	
Examinations and surveys.....	196, 422
Improvement.....	207, 549, 615, 681, 749, 848, 954, 1084, 1224

Huntsdale, Mo. <i>See</i> Missouri River.	Page.
Hurlbert, John J., dams of-----	1077, 1217
Huron Harbor and River, Ohio:	
Examination and survey-----	1018
Improvement-----	34, 41,
51, 52, 55, 60, 67, 80, 85, 101, 123, 153, 228, 238, 273, 309, 335, 363,	
399, 440, 490, 553, 618, 685, 755, 855, 965, 1104, 1202, 1248, 1293	
Occupancy and use of Government pier by owners of dock property--	553
Huron Lake:	
<i>See also</i> Northern and Northwestern Lakes.	
Corsica shoal, examination and survey-----	590
Erie Lake to, channel from, investigation relative to construction of	
railroad bridges with regard to interests of navigation-----	219
Harbor Beach (Sandbeach), Mich., harbor of refuge. <i>See</i> Harbor	
Beach.	
Harbor of refuge between St. Clair River and Pointe aux Barques,	
Mich., examination and survey for-----	186
Harbors on, improvement-----	144, 145
Pointe aux Barques, Mich., harbor of refuge, examination and	
survey-----	1016
Rogers City, Mich., harbor of refuge, examination and survey-----	1128
Superior Lake to, including St. Marys River, Hay Lake, Neebish	
channel, and Mud Lake, surveys-----	126, 877
Huron River, Mich., examination-----	794
Huron River, Ohio. <i>See</i> Huron Harbor and River.	
Husseys Sound, Portland Harbor, Me. <i>See</i> Portland Harbor.	
Huston & Co., R. G., payment to-----	479
Hutchinson River, N. Y. <i>See</i> East Chester Creek.	
Hyacinths, water. <i>See</i> Water hyacinths.	
Hyannis Harbor, Mass.:	
Examination for harbor of refuge (under Vineyard and Nantucket	
sounds)-----	953
Examinations and surveys-----	34, 420, 716, 897
Improvement-----	37, 53, 56, 59, 64, 66, 71, 75, 80, 86, 120, 184, 194,
218, 231, 276, 285, 333, 436, 485, 547, 612, 678, 745, 845, 952, 1082	
Hydraulic mining in California. <i>See</i> California Débris Commission and	
California State.	
Hydraulics. <i>See</i> Gauging, under Columbia and Mississippi rivers, and	
International Waterways Commission, under Northern and North-	
western Lakes.	
Hydrology. <i>See</i> Hydraulics.	
I.	
Ile au Haut Thoroughfare, Me., examination and survey-----	1015
Illinois and Michigan Canal, Ill.:	
Examinations and surveys (sometimes under the Illinois or the	
Des Plaines River; <i>see also</i> routes to the Mississippi, under	
Michigan Lake)-----	381, 456, 457, 509 ² , 510, 793, 879, 914, 995, 1261, 1262
Grant to State of U. S. land in aid of-----	38
Illinois and Mississippi (Hennepin) Canal, Ill.:	
Bridge across Rock River at Moline, construction of-----	830
Bridges, dams, dikes, and causeways, construction of, applicability	
of sec. 9, act of 1899, and occupancy of, and right of way across,	
U. S. land-----	886, 1009
Dam in Rock River feeder at Sterling, power station, etc., of Ster-	
ling Hydraulic Co. at-----	1260
Dams of Samuel S. Davis in Rock River not to interfere with	
operation, etc., of-----	1152
Dam and lock in Rock River feeder at Sterling, examination and	
survey-----	915
Dam and lock in Rock River feeder at Sterling, inclusion of, in	
canal project-----	995, 1112
Examinations and surveys-----	186, 381, 456, 457, 509
Improvement-----	575, 576, 636, 703, 780, 813, 830, 841, 927, 940, 1025, 1112, 1202
To be known as Illinois and Mississippi Canal-----	509, 575, 576
Transportation route to the seaboard, via, survey-----	233
Illinois Central Railroad Company, payment to-----	1138

	Page.
Illinois River, Ill.:	
<i>See also</i> Illinois and Michigan Canal <i>and</i> Illinois and Mississippi Canal.	
Dams at Lagrange and Kampsville, lowering of height of-----	1049
Improvement-----	124, 176, 177, 183, 214, 229, 239, 260, 269
290, 316, 346, 376, 409, 456, 509, 575, 598, 636, 703, 780, 879, 994, 1259 ²	
La Salle to Des Plaines River, examination and survey-----	386
La Salle to Ottawa, examination and survey-----	996
Mouth to La Salle, examinations and surveys-----	156, 165, 587
Operation of dredges and snag boats on, availability for, of permanent annual appropriation for similar purposes on the upper Mississippi; itemized statements of expenditures to accompany annual reports-----	516, 1259
Waterway from Mississippi River to Lake Michigan, via. <i>See</i> Michigan Lake, under Mississippi River.	
Illinois, State of:	
Assent of Congress to State act authorizing the city of Chicago to extend inlet pipes, etc., and construct piers into Lake Michigan for securing pure water-----	143
Proceeds of sales of certain lands granted to, to be applied to Illinois and Michigan Canal-----	38
Proceeds of sales of certain lands granted to, to be applied to certain internal improvements-----	92
Illustrations, etc.:	
<i>See also</i> Reports.	
Galveston Bay and Harbor, Tex., chart-----	809
Minnetonka Lake, Minn., chart-----	1129
Puget Sound-Lake Washington waterway, Wash., cadastral map-----	733
Unnecessary, to be excluded from reports to be printed; certificate as to necessity of printing-----	726, 1042, 1137
Winnebago Lake, Fox River, Wis., chart-----	1133
Illwaco Harbor, Wash. <i>See</i> Columbia River.	
Impaired works, restoration of. <i>See</i> Preservation and repairs.	
Imposts on tonnage of shipping. <i>See</i> Tolls.	
Imprisonment. <i>See</i> Penalties.	
Improvements, river and harbor. <i>See</i> Rivers and harbors.	
Indefinite appropriations, permanent. <i>See</i> Appropriations.	
Indemnities. <i>See</i> Bonds.	
Independent Line Steamers, payment to-----	1028, 1071, 1072
Indexes:	
Annual Reports of the Chief of Engineers, requirements regarding-----	517
Raymond's, to the Annual Reports of the Chief of Engineers-----	1010
Indiana Chute, Ohio River, Ind. <i>See</i> Falls at Louisville, etc., under Ohio River.	
Indiana Harbor, Ind.:	
Examinations and surveys-----	1127, 1273
Filling of Lake Michigan at, and construction of wharves, etc., by private parties-----	1178
Indiana, State of:	
Proceeds of sales of lands to be applied to certain internal improvements-----	92
Proceeds of sales of certain land granted to, to be applied to Wabash and Erie Canal-----	39, 68, 91, 106
Indian Island Slough, N. C., examination and survey-----	1018
Indianola Harbor, Tex. <i>See</i> Matagorda Bay.	
Indian River, Del.:	
Canal to Pocomoke River, Md., examination-----	715
Examinations and surveys-----	355, 1126
Improvement-----	368
Waterway from Chincoteague Bay, Va., to Delaware Bay. <i>See</i> Chincoteague Bay and Inlet.	
Waterway to Isle of Wight and Sinepuxent bays, Md., examination and survey-----	387

Indian River and Indian River Inlet, Fla.:	Page.
Canal to Halifax River, improvement (<i>see also</i> Haulover Canal)----	36
Canal to Mosquito Lagoon. <i>See</i> Haulover Canal.	
Haulover, the, to Gilberts bar, examination and survey-----	464
Improvement -----	630, 695, 730, 771, 869, 980, 1094, 1238
Jupiter Inlet. <i>See</i> Jupiter Inlet.	
Sebastian Inlet. <i>See</i> Sebastian Inlet.	
Titusville to Jupiter Inlet, examination and survey-----	587
Waterway from St. Johns River to Jupiter Inlet and Lake Worth, via. <i>See</i> St. Johns River.	
Indian River Bay, Del.:	
Waterway between Indian River and Isle of Wight and Sine- puxent bays, via. <i>See</i> Indian River.	
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Indian River Inlet, Fla. <i>See</i> Indian River, etc.	
Individuals, private. <i>See</i> Parties.	
Injury to public structures by private parties. <i>See</i> Structures.	
Inlets within shore lines or corporate limits, cases to be reported where projects include-----	1011
Inner harbors, cases of improvement of, by the U. S. to be reported----	1011
Inspectors. <i>See</i> Employees.	
Insular possessions. <i>See</i> Guam, Hawaiian, and Philippine islands, Porto Rico, and San Luis d'Apra and Welles harbors.	
Internal Improvement, Board of. <i>See</i> Boards, etc.	
International Commissions. <i>See</i> Boards, etc.	
International Navigation Company, sale of U. S. land at Fort Mifflin, Pa., to-----	656
International Waterways Commission. <i>See</i> Boards, etc.	
Interoceanic canal across isthmus of Panama, surveys for-----	884, 885 ⁴
Inwood, N. Y. <i>See</i> Jamaica Bay.	
Iowa River, Iowa:	
Examinations and surveys-----	88, 387
Wapello, north of, declared not navigable-----	179
Wapello to Toolsboro declared not navigable-----	703
Iowa, State of, grant of land to, for improvement of Des Moines River..	109, 178
Ipswich Bay, Mass. <i>See</i> Hodgkins Cove and Ipswich Harbor and River.	
Ipswich Harbor and River, Mass.:	
Examinations and surveys-----	245, 386, 1128
Improvement -----	444, 494, 623
Irondequoit Bay, N. Y., examinations and surveys-----	524, 718
Iron River, Wis., examination-----	720
Ironton, Ohio. <i>See</i> Ohio River.	
Isabel, Point, Tex. <i>See</i> Laguna Madre.	
Islais Creek, Cal., examinations and surveys-----	418, 1272
Island (foreign) possessions. <i>See</i> Guam, Hawaiian, and Philippine islands, Porto Rico, and San Luis d'Apra and Welles harbors.	
Isle of Wight Bay, Md.:	
Inlet into the Atlantic at the Hommacks, examination and survey--	209
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Waterway to Sinepuxent Bay and Indian River, examination and survey -----	387
Isles of Shoals, Me. and N. H.:	
Examination and survey for breakwater-----	1276
Improvement -----	23, 25, 950
Smutty Nose Island, examination and survey-----	234
Smutty Nose to Cedar Island, examinations and surveys-----	23, 898
Islip, N. Y. <i>See</i> Champlin Creek.	
Isthmian canal to connect Atlantic and Pacific oceans, surveys for----	884, 885 ⁴
Isthmus of Panama, surveys for canal across-----	884, 885 ⁴
Istokpoga Creek, Fla. <i>See</i> Kissimmee River.	
Ivy Landing, Mississippi River, Ill. <i>See</i> Rush Island bend, etc., under Mississippi River.	

J.

Jacksonport, Ark. <i>See</i> White River.	Page.
Jacksons Creek, Va., examination-----	720, 901
Jacksonville, Fla. <i>See</i> St. Johns River.	
Jamaica Bay, N. Y.:	
Canal from main ship channel to Long Beach Inlet, examination and survey-----	592
Channel from Far Rockaway to Inwood, examination and survey-----	795
Channel to Coney Island channel, via Rockaway Inlet, examination and survey-----	1190
Channel to Far Rockaway Bay, examination and survey-----	467
Channel to Peconic Bay, through Great South Bay, examination and survey-----	1277
Cooperation of General Government with city of New York in improvement, etc., of-----	1276
Examination and survey, including entrance at Rockaway Inlet and waters having outlet in Dead Horse Inlet-----	1276
Improvement-----	615
Waterway to Cornells Creek and Landing, examination and survey-----	326
James, C. E., construction of Scott Point (Hales bar) lock and dam, Tennessee River-----	1050, 1062
James (Dakota) River, N. and S. Dak., examinations and surveys--	234, 463, 648
James River, Va.:	
Canal to Kanawha River, W. Va. <i>See</i> James River and Kanawha Canal.	
Examinations and surveys-----	78, 185, 354, 901
Improvement-----	119, 185, 193, 206, 216, 231, 240, 257, 267, 286, 313, 341, 369, 403, 447, 496, 562, 626, 693, 768, 866, 977, 1089, 1232
Improvement, assent of Congress to State acts for-----	18, 21, 113
Jamestown Island, protection of-----	693, 768, 1060
Middle Ground bar (Hampton Roads). <i>See</i> Hampton Roads.	
Transportation route to the seaboard, survey-----	233
James River and Kanawha Canal, Va. and W. Va., examinations and surveys-----	185, 209
Jamestown Exposition, Va. <i>See</i> Hampton Roads.	
Jamestown Island, James River, Va. <i>See</i> James River.	
Jarvis Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Jefferson, Tex., waterway to Shreveport, La. <i>See</i> Cypress Bayou.	
Jefferson City, Mo. <i>See</i> Missouri River.	
Jeffersonville, Ind. <i>See</i> Ohio River.	
Jekyl Creek, Ga.:	
<i>See also</i> Savannah-Fernandina waterway.	
Examinations and surveys-----	326, 464
Improvement-----	501, 566, 629, 695
Jellison, Cape, Me. <i>See</i> Penobscot Bay.	
Jenkins Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Jennings, Orville J., relief of-----	221
Jersey City, N. J. <i>See</i> New York Bay and Harbor.	
Jetties. <i>See</i> Structures.	
Johnsons Bayou, La.:	
Estimate of cost of improvement (contained in report of survey of Sabine Lake from Sabine Pass to mouths of Sabine and Neches rivers, Tex.)-----	802
Improvement-----	872, 1242
Johnsons Creek, Conn. <i>See</i> Bridgeport Harbor.	
Jonesboro, Me. <i>See</i> Chandlers River.	
Jones, George M., relief of-----	103
Jones, Goshom A., relief of-----	197
Jonesport, Me. <i>See</i> Moosabec bar.	
Jones River, Mass. <i>See</i> Kingston Bay and Harbor.	
Jordan River, Miss.:	
Examinations and surveys-----	646, 1129
Improvement-----	1240
Jourdan, J. W., dams of-----	1216

Joyces Creek, N. C. <i>See</i> Dismal Swamp Canal and Norfolk Harbor waterways.	Page.
J. R. Earle Development Company, dam of-----	1286
Juan de Fuca Strait, Wash.:	
Examination and survey of Duncan rocks-----	1021
Harbor of refuge between San Francisco and. <i>See</i> Port Orford Harbor.	
Judith, Mont. <i>See</i> Missouri River.	
Judith, Point, R. I., harbor and pond. <i>See</i> Point Judith Harbor and Pond.	
Junction and Breakwater Railroad occupancy of pier at Lewes, Del----	188
Jupiter Inlet, Fla.:	
Examinations and surveys-----	793
Improvement-----	737, 925
Waterway to St. Johns River and Lake Worth. <i>See</i> St. Johns River.	
Justice, Department of. <i>See</i> Attorney-General.	

K.

Kalamazoo-Clinton canal, Mich., extension of channel in Clinton River up to-----	991
Kalamazoo River, Mich.:	
Mouth to Kalamazoo, examination and survey-----	716
Saugatuck to mouth. <i>See</i> Saugatuck Harbor.	
Saugatuck to New Richmond, examination and survey-----	800
Kampeska Lake, S. Dak., survey for reservoir-----	918, 920
Kampsville, Ill. <i>See</i> Illinois River.	
Kanawha and Ohio Railroad Company-----	470
Kanawha River, W. Va.:	
Acquisition of land authorized-----	302, 303
Canal to James River, Va. <i>See</i> James River and Kanawha Canal.	
Great Falls to Lock No. 2, examination and survey-----	1021
Great Falls to the mouth, examination and survey-----	209
Harbor of refuge at mouth. <i>See</i> Point Pleasant, under Ohio River.	
Improvement-----	212, 230, 239, 257, 267, 286, 302, 303, 313, 324, 342, 370, 383, 403, 447, 471, 472, 497, 563, 627, 668, 669, 731, 811
Locks and dams, specific appropriations for operating and care--	313, 342, 370
Operations by hired labor, continuation of, notwithstanding certain provisions of law regarding manner of doing work-----	324
Right of way, etc., of Kanawha and Ohio R. R. through lock and dam property-----	470
Transportation route to the seaboard, survey-----	233
Kankakee River, Ill. and Ind., examinations and surveys-----	280, 300, 388, 419
Kansas City, Mo. and Kans. <i>See</i> Kansas and Missouri rivers.	
Kansas City, St. Joseph and Council Bluffs Railroad Company, payment to-----	538
Kansas (Kaw) River, Kans. and Mo.:	
Dams of Chicago-Topeka Light, Heat, and Power Co. in Shawnee County-----	672
Dams of Topeka Water and Electric Power Co. in Shawnee County--	610
Examinations and surveys-----	280 ² , 644, 1014
Improvement of mouth (under Missouri River)-----	832, 881
Kansas, State of, formation of State government; certain proceeds of sales of lands to be applied to internal improvements-----	141
Karquines (Carquinez) Strait, Cal. <i>See</i> Carquinez Strait and San Pablo and Suisun bays.	
Kaskaskia, Ill. <i>See</i> Mississippi River.	
Kaskaskia bend, Mississippi River. <i>See</i> Kaskaskia, under Mississippi River.	
Kaskaskia River, Ill.:	
Examination and survey-----	464
Improvement-----	575, 637
Katalla Bay, Alaska, examination and survey, including adjacent bays--	1272
Kaukauna, Wis. <i>See</i> Fox River.	
Kawkawlin River, Mich., examination-----	716

Kaw (Kansas) River, Kans. and Mo. <i>See</i> Kansas River.	Page.
Keating, Oliver, repair of pier in Kennebunk River, Me.-----	17
Kecoughtani (Hampton) Creek, Va. <i>See</i> Hampton Creek, or River.	
Kegonsa Lake, Wis., survey (under Rock River)-----	88
Kegotank Bay, Va., waterway from Franklin to Cape Charles, via. <i>See</i> Franklin.	
Kelley Bayou, La., waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Kelseys Point, Conn. <i>See</i> Duck Island Harbor.	
Kenduskeag River, Me.:	
Examinations and surveys-----	798, 896
Improvement provided for in report of May 3, 1897, and adopted, and appropriated for by act of March 3, 1899, under Penobscot River.-----	861
Kennebec River, Me.:	
Bath, Me., anchorage grounds, establishment of-----	1151
Examinations and surveys-----	156, 465, 590, 896, 1128
Improvement-----	37, 42, 53, 58, 90, 123, 154, 162, 176, 177, 184, 194 ² , 207, 217, 232, 242, 494, 557, 622, 689, 762, 973, 1200, 1220, 1292
Parkers Head Harbor and channel. <i>See</i> Parkers Head Harbor and channel.	
Richmond Harbor. <i>See</i> Richmond Harbor.	
Kennebunk, Me. <i>See</i> Kennebunk River.	
Kennebunk River, Me.:	
Examinations and surveys-----	235, 523
Improvement-----	47, 56, 59, 66, 74, 80, 85, 123, 184, 194, 260, 285, 311, 338, 557, 1081
Pier at mouth, tonnage duty for repair of-----	17
Kennedy, Matthew G., relief of representatives of George Williams for work done under power of attorney from-----	284
Kenosha (Southport) Harbor, Wis.:	
Effect of wave action, with plans for overcoming same-----	837, 1108
Examinations and surveys-----	102, 528, 803, 837, 902, 968, 1108
Improvement-----	102, 108, 121, 154, 176, 177, 181, 191, 202, 227, 237, 259, 272, 292, 310, 337, 365, 400, 442, 492, 554, 620, 687, 757, 858, 929, 968, 1109, 1256
Kenova and Big Sandy Railroad Company-----	1035
Kent Island Narrows, Md. <i>See</i> Chester River.	
Kent Narrows, Md. <i>See</i> Chester River.	
Kentucky and Indiana Bridge Company, relief of-----	611
Kentucky River, Ky.:	
Acquisition of land authorized-----	302, 303, 415
Alteration of dams on Ohio River at Louisville, resulting in increased depth at Lock No. 1 on. <i>See</i> Falls at Louisville, under Ohio River.	
Examination and survey-----	280
Improvement-----	294, 302, 303, 316, 345, 374, 408, 415, 453, 505, 571, 634, 700, 775, 812, 830, 927, 940, 1025, 1037, 1104 ² , 1248, 1291
Navigable tributaries (North, Boone, Middle, and South forks, and Troublesome Creek), examination and survey-----	280
Payment to Clark County of cost of bridges across Twomile Creek and of repair of damage to road at Lock and Dam No. 10, at Ford-----	1104
Right of way, etc., of Carrollton and Lock Number One Turnpike Road Co. through land at Lock No. 1-----	430
Kentucky Rock Gas Company-----	529
Keogh, Fort, Mont. <i>See</i> Tongue River.	
Keokuk and Hamilton Water Power Company-----	934, 1043, 1064
Keokuk (Des Moines Rapids) Canal, Mississippi River. <i>See</i> Des Moines rapids, under Mississippi River.	
Kerr Run, Ohio, harbor of refuge. <i>See</i> Pomeroy, under Ohio River.	
Kewaunee Harbor and River, Wis.:	
Examinations and surveys-----	219, 323, 328, 901, 1280
Improvement-----	323, 350, 365, 400, 442, 492, 554, 620, 687, 757, 858, 969, 1110, 1257
Preparation of plan for expenditure of funds appropriated by local authorities-----	323

Keweenaw Bay-Lake Superior waterway (Portage Lake canals), Mich.:	Page.
<i>See also</i> Portage Lake (Houghton County).	
Acquisition by U. S. of lands, franchises, and property pertaining to	455, 556
Grant of land to State of Michigan for construction of	148,
	158, 178, 189, 199, 220
Harbor of refuge, examinations and surveys	299, 1275
Improvement	635, 702, 778, 813, 831, 927, 940, 1025, 1108
Operating and care (specific appropriations)	556, 557
Keweenaw Point, Mich.:	
Waterway across. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Harbor of refuge on south shore of Lake Superior in vicinity of, examination and survey	1129
Keyport Harbor, N. J.:	
Examination and survey	208
Improvement	380, 615, 682, 750, 849, 975, 1087, 1228
Key West Harbor, Fla.:	
Examinations and surveys	354, 439, 489, 1013, 1273
Improvement	380, 489, 551, 617, 683, 753, 851, 925, 961, 1093, 1237
Kill van Kull, N. Y. and N. J. <i>See</i> New York Bay and Harbor and Staten Island-New Jersey channel.	
King County, Wash.:	
<i>See also</i> Waterway to Lake Washington, etc., under Puget Sound.	
Examination and survey of Puget Sound-Lake Washington waterway with view to construction in conjunction with	1267
Kingston, R. I. <i>See</i> Narrow River and Point Judith Harbor and Pond.	
Kingston Bay and Harbor, Mass.:	
Examinations and surveys (limits not defined)	590, 1128
Examination and survey of Goose Point channel from Plymouth Harbor to public wharf at	521
Improvement	484, 613
Kinnickinnick River, Wis. <i>See</i> Milwaukee Bay, Harbor, and River.	
Kiskiminitas River, Pa., examination and survey	280
Kissimmee Lake and River, Fla.:	
<i>See also</i> Florida State, canal across.	
Headwaters to Gulf of Mexico, via Lake Okechobee and Caloosahatchee River, and including Istokpoga Creek, examination and survey	894
Improvement, including Istokpoga Creek	980, 1094, 1238
Waterway from St. Johns River to Charlotte Harbor or Peace Creek, via. <i>See</i> Tohopekaliga Lake.	
Klamath Indian Reservation, Oreg., power plants, railroads, dams, reservoirs, etc., construction of	1183
Klamath River, Cal., examination and survey	519
Klaskanine (Klasquine) Creek, or River, Oreg. <i>See</i> Klasquine Creek, or River.	
Klasquine Creek, or River, Oreg.:	
Examination and survey	526
Improvement	579
Koochiching Company, dam of, in Rainy River, Minn.	823, 907, 1027, 1074
Kootenai River, Idaho and Mont.:	
Examinations and surveys	644, 717, 722, 803, 916
Improvement	790, 818

L.

Labor:

<i>See also</i> Appropriations, Bonds, Contracts, Employees, Proposals, etc.	
Bonds of contractors to cover payment of liabilities for	324,
	352, 382, 383, 415, 463, 676, 1072
Contracts to be separate for each class of	155, 164
Proposals received for, list of, with names of bidders, to be reported to Congress	155, 164
Proposals and contracts, combination in single, of two or more separate works	580, 1006, 1122, 1270
Protection of persons furnishing. <i>See</i> Bonds, <i>supra</i> .	
Voluntary or personal services, acceptance of, forbidden, except in certain emergencies	394
Lackey, Stubbs &, relief of	603

Lac La Belle, Mich. <i>See</i> Lac La Belle Harbor.	Page.
Lac La Belle Canal, Mich. <i>See</i> Lac La Belle Harbor.	
Lac La Belle Harbor, Mich.:	
Examinations and surveys-----	155, 420
Examination and survey for harbor of refuge on south shore of Lake Superior in vicinity of Keweenaw Point-----	1129
Grant of land to State of Michigan for construction of Lac La Belle Canal, to Lake Superior-----	157
Lac La Belle Harbor Improvement Company, grant of land for use of, in construction of Lac La Belle Canal-----	157
Laconner, Wash. <i>See</i> Swinomish Slough.	
La Croix (Cross Village) Harbor, Mich. <i>See</i> Cross Village Harbor.	
La Crosse Harbor, Wis. <i>See</i> Mississippi River.	
Ladders, fish:	
At Government dams, requirements regarding-----	518
At private power, etc., dams, provision for-----	1184
Ladd, W. S. (dredge), damage to wharf at Cathlamet, Wash., by-----	1219
Lafayette, Oreg. <i>See</i> Yamhill River.	
Lafourche Bayou, La.:	
Examinations and surveys-----	121, 219, 388, 465 ² , 521
Improvement-----	272, 295, 314, 351, 406, 503, 569, 632, 697, 772, 871, 983
Lock and dams of the Atchafalaya Basin and Lafourche Basin levee boards-----	1014, 1047, 1241
Waterway from Mississippi River at Donaldsonville to the Rio Grande. <i>See</i> Donaldsonville, under Mississippi River.	
Lafourche Basin levee board of Louisiana-----	1014, 1047, 1241
Lagrange, Ill. <i>See</i> Illinois River.	
Lagrange Bayou, Fla.:	
Examination and survey-----	354
Improvement-----	372, 449, 501, 567
La Grasse River, N. Y. <i>See</i> Grass River.	
Laguna Madre, Tex.:	
<i>See also</i> Corpus Christi and Padre Island Harbor Company.	
Channel from Brazos Santiago to Point Isabel, examination and survey-----	355
Channel from Gulf of Mexico to Point Isabel, via Brazos Santiago, examination and survey-----	900
Channel from Harlingen, on Arroyo Colorado, to Point Isabel, examination and survey-----	1279
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Laird Slough, San Joaquin River, Cal. <i>See</i> San Joaquin River.	
Lake City, Minn. <i>See</i> Mississippi River.	
Lake Drummond Canal, Va. and N. C. <i>See</i> Dismal Swamp Canal.	
Lake Erie and Ohio River Ship Canal, construction of-----	1207
Lake Erie and Ohio River Ship Canal Company-----	1207
Lake Harbor (Mona Lake), Mich., examination and survey-----	1128
Lake Providence, La. <i>See</i> Mississippi River.	
Lakes Bay, N. J.:	
Sound between Barnegat Bay and Great Egg Bay. <i>See</i> Barnegat Bay, Harbor, and Inlet.	
Thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Lake Shore and Michigan Southern Railway Company, construction of pier and dredging at Ashtabula Harbor-----	617
Lake Superior Ship Canal, Railway and Iron Company Canal, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Lakeview, Chicago, Ill. <i>See</i> Chicago Harbor and River.	
Lake Washington Canal, Wash. <i>See</i> Puget Sound.	
Lamprey River, N. H.:	
Examination and survey-----	234
Improvement (sometimes under Cocheco River)-----	338, 366, 973
Land:	
Acquisition by condemnation at private expense-----	1162, 1197
Acquisition by direct purchase, condemnation, or donation, requirements, etc., regarding (<i>see also</i> Dams and Locks, <i>infra</i>)-----	95, 479
Acquisition by purchase forbidden unless authorized by law-----	23
Acquisition by sale or transfer from one work to another-----	1008

Land—Continued.		Page.
Alaska, rights of way for railroads.....		825
Belonging to the U. S., list of lots or parcels.....		1024
Cession of jurisdiction by States.....		95, 479
Condemnation of. <i>See</i> Acquisition, <i>supra</i> , and Dams, Easements, Locks, and Rights of way, <i>infra</i> .		
Dams, acquisition of sites for, authorized; methods of procedure, etc.....		324, 351, 479
Dams, acquisition of sites for, at private expense.....		1162, 1197
Donations of. <i>See</i> Acquisition and Dams, <i>supra</i> , and Easements, Locks, and Rights of way, <i>infra</i> .		
Easements, acquisition by condemnation at private expense.....		1162, 1197
Easements, acquisition by direct purchase, condemnation, or donation, requirements, etc., regarding.....		95, 479
Forest reserves, rights of way for canals and various structures for mining, etc., purposes.....		1063
Locks, acquisition of sites for, at private expense.....		1162, 1197
Locks, acquisition of sites for, authorized; methods of procedure, etc.....		324, 351, 479
Locks, acquisition of sites for, in connection with dams constructed by private parties.....		1184
Lots owned by the U. S., list of.....		1024
Moneys received from various sources, and not paid into Treasury, annual statement regarding.....		1205
Occupancy of public property by private persons, cases to be reported to Congress.....		886
Owned by the U. S., list of lots or parcels.....		1024
Parcels owned by the U. S., list of.....		1024
Philippine Islands, control of property and rights acquired from Spain.....		1029, 1030
Porto Rico, underlying harbor areas and navigable waters, jurisdiction of Federal Government.....		1030
Public, list of lots or parcels owned by the U. S.....		1024
Public property, use, occupancy, etc., of, by private persons, cases to be reported to Congress.....		886
Purchase by transfer from one work to another (<i>see also</i> Acquisition, Dams, Easements, and Locks, <i>supra</i> , and Rights of way, <i>infra</i>).....		1008
Receipts from various sources not paid into Treasury, annual statement regarding.....		1205
Rights of way, acquisition by direct purchase, condemnation, or donation, requirements, etc., regarding (<i>see also</i> Acquisition, Dams, and Locks, <i>supra</i>).....		95, 479
Rights of way, easements. <i>See</i> Easements, <i>supra</i> .		
Rights of way for canals and various structures in forest reserves for mining, etc., purposes.....		1063
Rights of way for railroads in Alaska.....		825
Sale of, moneys received and not paid into Treasury, annual statement regarding.....		1205
Sale of, when not needed.....		1008
States, cession of jurisdiction to U. S.....		95, 479
States admitted into the Union after 1841, grants of, for purposes of internal improvement.....		93
Titles. <i>See</i> Acquisition, Dams, Easements, Locks, and Rights of way, <i>supra</i> .		
Transfer of, from one work to another.....		1008
Use of public property by private persons, cases to be reported to Congress.....		886
L'Angeville River, Ark.:		
Examination and survey (under St. Francis River).....		774
Improvement.....		269, 295, 315, 873, 986, 1101, 1246
La Plaisance Bay, Mich.:		
<i>See also</i> Monroe Harbor.		
Improvement.....		37, 51, 54, 60, 67, 75
Survey.....		35

Larchmont Harbor, N. Y. :	Page.
Examination and survey	524
Improvement	549, 849, 954, 1084, 1224
La Trappe Creek, or River, Md. :	
Examinations and surveys	388, 521, 589, 798
Improvement	626, 692, 1088, 1230
Laurel, Del. <i>See</i> Broad Creek River.	
Lavaca Bay, Tex. :	
Examination and survey of channel between Matagorda Bay and ..	1020
Examination and survey of channel between Pass Cavallo and Port Lavaca	1279
Lawrenceburg Harbor, Ind. <i>See</i> Ohio River.	
Laws of Congress :	
For improvement of rivers and harbors, compilation of	1010, 1063, 1281
For protection, etc., of navigable waters. <i>See</i> Navigable waters.	
Laws (Upper) Thoroughfare, Deal Island, Md. <i>See</i> Deal Island.	
Leaf River, Miss. :	
Examination and survey	522
Improvement	568, 631, 697, 772, 871, 982, 1097, 1240
League Island, Delaware River, Pa. <i>See</i> Delaware Bay and River.	
Leamings Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Leases :	
Of public property authorized ; cases to be reported annually ..	602, 655, 728
Of water-power, etc., privileges. <i>See</i> Barren, Cumberland, Green, and Muskingum rivers.	
Receipts from various sources not paid into Treasury, annual statement regarding	1205
Leavenworth, Kans. <i>See</i> Missouri River.	
Leavenworth, Fort, Kans. <i>See</i> Missouri River.	
Le Claire, Iowa. <i>See</i> Mississippi River.	
Leech Lake, Minn., reservoir. <i>See</i> Reservoirs, under Mississippi River.	
Lee, Franklin, payment to	938
Lee Slough, Fla. <i>See</i> Apalachicola Bay and River and Chipola River.	
Legal proceedings in cases of violations of laws for protection, etc., of navigable waters. <i>See</i> Attorney-General and District attorneys.	
Legislation for protection, etc., of navigable waters. <i>See</i> Navigable waters.	
Leipsic River, Del., examination and survey	387
Leland Harbor, Mich. <i>See</i> Carp River.	
Lemon Bay, Fla. :	
Channel to Gasparilla Sound, examination and survey	1012
Route to Sarasota Bay, examination and survey	894
Lemon Creek, Staten Island, N. Y., improvement (under Staten Island-New Jersey channel)	749, 955
Leonardtown Harbor, Md. <i>See</i> Breton Bay.	
Les Galops Island, St. Lawrence River, N. Y. <i>See</i> St. Lawrence River.	
Levees. <i>See</i> Structures.	
Levels, water. <i>See</i> Gauging, under Columbia and Mississippi rivers, International Waterways Commission, under Northern and Northwestern Lakes, and Depths.	
Leviathan (dredge), documenting of, as a vessel of the U. S.	1163
Levisa Fork, Big Sandy River, Ky. <i>See</i> Big Sandy River.	
Levying of tonnage duties. <i>See</i> Tolls.	
Lewes Creek and Harbor, Del. :	
Iron pier in Delaware Bay. <i>See</i> Delaware Bay and River.	
Waterway to Chincoteague Bay, Va. <i>See</i> Delaware Bay and River.	
Waterway to Rehoboth Bay. <i>See</i> Delaware Bay and River.	
Lewis and Clark River, Oreg., examinations and surveys	353, 594
Lewis River, Wash. :	
Examinations and surveys	386, 423, 648, 720, 796, 803
Improvement, including North Fork	883, 1004, 1119, 1268
Lewis Thoroughfare, N. C., examination and survey of Carrot Island Slough, and thence to and including	1018
Lexington Harbor, Mich., examination and survey	522

	Page.
Lexington Harbor, Mo. <i>See</i> Missouri River.	
L'Hommedieu shoal, Vineyard Sound, Mass., examination for harbor of refuge (under Vineyard Sound)-----	953
Liabilities of contractors. <i>See</i> Bonds, Contracts, Labor and Materials.	
Liberty Island, Mississippi River, Mo. <i>See</i> Mississippi River.	
Liberty Island, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Licenses, revocable. <i>See</i> Leases, Navigable waters, and Property.	
Licking River, Ky.:	
Bar in Ohio River at mouth of. <i>See</i> Ohio River.	
Examinations and surveys-----	280, 355, 465, 644, 715, 875
Harbor of refuge at mouth, examination and survey-----	196, 715
Improvement-----	505, 572
Life, human, acceptance of voluntary or personal service forbidden, except to save, etc-----	394
Life-saving stations in the Philippines, construction of-----	1029, 1063, 1064
Lighters. <i>See</i> Tolls, Vessels, and Wrecks.	
Light-House Board, prohibition against establishment of certain aids to navigation by persons, etc., not under control of-----	1182
Light-houses:	
Erection of lights and, in the Philippines-----	1029, 1063, 1064
Erection of, under the Light-House Board-----	1182
Location of each work with reference to nearest, to be stated in annual reports-----	155, 164
Lights:	
Erection of, under the Light-House Board-----	1182
In the Philippines, in aid of navigation. <i>See</i> Light-houses.	
On power, etc., dams constructed by private parties, maintenance of-----	1184
Lillington River, N. C.:	
Examination and survey-----	329
Improvement-----	342, 370
Lime, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Limestone Creek, Ky. <i>See</i> Maysville, under Ohio River.	
Linchester River, Md., examination and survey-----	589
Lincolnville Harbor, Me., examinations and surveys-----	280, 645
Linkhorn Bay, Va.:	
Examination and survey-----	298
Waterway from Lynnhaven Bay to Elizabeth River, via. <i>See</i> Lynnhaven Bay.	
Link River, Oreg., examination and survey-----	468
Lints, J. J., relief of-----	742
Listons Point, Delaware Bay. <i>See</i> Delaware Bay and River.	
Listons Tree Point, Delaware Bay. <i>See</i> Listons Point, under Delaware Bay and River.	
Little Annemessex River, Md. <i>See</i> Crisfield Harbor.	
Little Assawaman Bay, Del.:	
Waterway from Chincoteague Bay, Va., to Delaware Bay, via. <i>See</i> Chincoteague Bay and Inlet.	
Waterway from Indian River to Isle of Wight and Sinepuxent bays, via. <i>See</i> Indian River.	
Little Badenock Bay, Mich. <i>See</i> Little Bay de Noc.	
Little Bay de Noc (Noquette), Mich. <i>See also</i> Gladstone Harbor.	
Examination and survey-----	716
Little Caillou Bayou, La., examination and survey-----	326
Little Calumet River, Ill. <i>See</i> Calumet Harbor and River.	
Little Chain, Ohio River. <i>See</i> Ohio River.	
Little Coal River, W. Va., examination-----	721
Little Compton, R. I. <i>See</i> Sakonnet Harbor and River.	
Little Creek, Del., examination and survey-----	328
Little D'Arbonne Bayou, La., improvement-----	697
Little Dauphin Island, Mobile Bay, etc., Ala. <i>See</i> Dauphin Island and Little Dauphin Island, under Mobile Bay, Harbor, and River.	
Little Deal Island, Md. <i>See</i> Deal Island.	
Little Duck Creek (Leipsic River), Del. <i>See</i> Leipsic River.	

Little Egg Harbor Bay, N. J.:	Page.
Examination and survey-----	593
Improvement-----	77, 87, 123
Sound between Barnegat Bay and Great Egg Bay. <i>See</i> Barnegat Bay, Harbor, and Inlet.	
Little Egg (New) Inlet, N. J., examination and survey-----	593
Little Falls, Mississippi River, Minn. <i>See</i> Mississippi River.	
Little Falls Water Power Company-----	429, 430
Little Fork River, Minn., examination and survey-----	1129
Little Harbor, Woods Hole, Mass. <i>See</i> Woods Hole Harbor and channel.	
Little Harbor, N. H.:	
Examination and survey-----	421
Improvement-----	435, 484, 546, 612, 677, 744, 844, 950
Little Kanawha Navigation Company. <i>See</i> Little Kanawha River.	
Little Kanawha River, W. Va.:	
Acquisition of franchise and property of Little Kanawha Navigation Co-----	384, 720, 978, 1090
Collection of tolls by Little Kanawha Navigation Co., or others-----	342, 370, 403, 447, 497, 563
Estimate of cost of repairing locks and dams of Little Kanawha Navigation Co-----	978
Examinations and surveys-----	234, 720, 1021, 1232
Harbor of refuge at mouth. <i>See</i> Parkersburg, under Ohio River.	
Improvement-----	257, 270, 291, 321, 342, 370, 403, 447, 497, 563, 769, 866, 978, 1090 ² , 1232
Little (Lower) Klamath Lake, Oreg. and Cal., changing of level-----	1066
Little Lake, La. (part of route between New Orleans and Grand Pass), examination and survey-----	326
Little Miami River, Ohio, examination for harbor of refuge-----	647
Little Missouri River, Ark.:	
Examination and survey-----	185
Improvement-----	194, 204
Little Mud River, Ga., waterway via. <i>See</i> Savannah-Fernandina waterway.	
Little Muscle Shoals Canal, Ala. <i>See</i> Muscle Shoals Canal, etc., under Tennessee River.	
Little Narragansett Bay, R. I. and Conn.:	
<i>See also</i> Pawcatuck River.	
Dennisons rocks to Rhodes Folly, examination and survey-----	244
Improvement-----	260, 276, 285, 311, 333, 360, 1084
Watch Hill, R. I., entrance to wharves, examination and survey-----	468
Watch Hill Cove, R. I., examination and survey-----	594
Little Pass, Soda Lake, La. (along route between Shreveport, La., and Jefferson, Tex.). <i>See</i> Cypress Bayou.	
Little Peconic Bay, N. Y. <i>See</i> Peconic Bay.	
Little Pedee River, S. C.:	
Examinations and surveys-----	300, 468
Improvement-----	500, 565, 628, 694, 770, 979, 1091, 1234
Little Pigeon River, Tenn.:	
Examination and survey-----	595
Improvement-----	633, 699, 775, 874, 986, 1103, 1248
Little Red River, Ark.:	
Examinations and surveys-----	186, 353, 418, 1012
Improvement-----	194, 452, 504, 728 ²
Little River, Ala., dam of Henry T. Henderson at Blanche-----	1212
Little River, Ark. and Ind. T. (tributary of Red River), examinations and surveys-----	278, 384, 463, 643, 714
Little River, Del.:	
Connection with St. Jones River, near Dover, by canal, etc., examination and survey-----	1126
Examination and survey-----	1273
Little River, Ky., examination and survey-----	419
Little River, La. (part of Red River). <i>See</i> Red River.	

Little River, La. (tributary of Black River) :	Page.
Examinations and surveys -----	465, 716
Improvement -----	503
Little River, Mo. and Ark. (tributary of St. Francis River) :	
Examination and survey -----	467
Improvement -----	513, 578, 671, 728
Little River (Waddington), N. Y. <i>See</i> Waddington Harbor.	
Little River, N. C., examination and survey -----	1277
Little Rock, Ark. <i>See</i> Arkansas River.	
Little Salem Creek, N. J., examination and survey -----	525
Little Sarasota Bay, Fla. <i>See</i> Sarasota Bay.	
Little Shenango River, Pa., control of flood waters by 'The Lake Erie and Ohio River Ship Canal Company -----	1209
Little Sodus Bay Harbor, N. Y. :	
Improvement -----	122,
143 ² , 144, 153, 162, 176, 177, 183, 192, 204, 213, 229, 238, 258, 273, 293,	
308, 334, 361, 397, 437, 486, 549, 614, 681, 749, 847, 954, 1086, 1226	
Survey of harbors between Genesee and Oswego rivers including --	43
Little Tennessee River, Tenn. :	
Examinations and surveys -----	234, 245, 354, 900
Improvement (sometimes under Tennessee River above Chatta- nooga) -----	380, 1103, 1247
Little Traverse Bay, Mich. :	
<i>See also</i> Petoskey Harbor.	
Harbor of refuge near Petoskey, examination and survey -----	420
Little Wabash River, Ill., examinations and surveys -----	644, 994
Little Wicomico River, Va., examinations and surveys -----	235, 648, 720
Little Woods Hole Harbor, Mass. <i>See</i> Woods Hole Harbor and channel.	
Livingston Creek, N. C., examination and survey -----	1018
Lloyds Harbor, N. Y. :	
Channel to Cold Spring Bay, examination and survey -----	328
Channel from Huntington Bay to Cold Spring Harbor, examination and survey -----	1130
Channel from Oyster Bay to Cold Spring Bay, examination -----	795
Lobdell, Ebenezer, relief of -----	90
Lockport, Ill. <i>See</i> Des Plaines River and Sanitary District of Chicago.	
Locks :	
<i>See also</i> Buildings, Canals, etc., Contracts, Land, Navigable waters, Structures, and Tolls.	
Acquisition of sites, etc., for, at private expense -----	1162, 1197
Acquisition of sites, etc., for, authorized; methods of procedure etc -----	324, 351, 479
Permanent indefinite appropriation for operating and care of canals, etc. <i>See</i> Appropriations.	
Provision for, in connection with dams constructed by private parties -----	1184
Lockwood Folly River, N. C. :	
Examinations and surveys -----	298, 467, 1018
Improvement -----	564, 627, 694
Loggy Bayou, La. :	
Examination and survey -----	389
Improvement -----	406
Logs, etc., running of, general provisions of law regarding -----	889 ² ,
	890 ² , 893, 908, 1010
Lone Tree Point, Cal. <i>See</i> San Pablo Bay.	
Long Beach, N. Y. <i>See</i> Parsonage Creek, or River.	
Long Beach, Plymouth Harbor, Mass. <i>See</i> Plymouth Bay and Harbor.	
Long Beach (Peters Neck) Bay, N. Y. <i>See</i> Peters Neck Bay.	
Long Beach Inlet, N. Y., canal to Jamaica Bay, examination and survey --	592
Long Branch, N. J., examination and survey for breakwater -----	387
Long Cove, Me., examination and survey -----	1128
Long Island Sound :	
Fishing or dredging for shellfish, or interference with navigation by ocean steamships, etc., in channels to or from New York Har- bor, prohibition, etc., regarding -----	708
Prevention of obstructive and injurious deposits in New York Harbor, N. Y., and legal provisions regarding (<i>see also</i> New York Bay and Harbor) -----	462, 481, 708, 1010

	Page.
Long Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Long Point, Greenwich Harbor, R. I. <i>See</i> Greenwich Harbor.	
Long Prairie River, Minn., examination of, including sources-----	920
Long rock, Echo Bay Harbor, N. Y. <i>See</i> Echo Bay Harbor.	
Long Tom River, Oreg. :	
Examination-----	796
Improvement-----	883, 1002
Lookout Bight, N. C. <i>See</i> Lookout, Cape.	
Lookout, Cape, N. C., harbor of refuge, examinations and surveys--	718, 801, 850
Lookout, Cape, Oreg., harbor of refuge, examination and survey-----	796
Loosacoona River, Miss., examination and survey-----	384
Lorain Harbor, Ohio. <i>See</i> Black River Harbor.	
Loramie reservoir, Ohio. <i>See</i> Miami and Erie Canal.	
Lord, Tobias, repair of pier in Kennebunk River, Me-----	17
Lots of land owned by the U. S. <i>See</i> Land.	
Louisa, Ky. <i>See</i> Big Sandy River.	
Louisa (Levisa) Fork, Big Sandy River, Ky. <i>See</i> Big Sandy River.	
Louisiana Harbor, Mo. <i>See</i> Mississippi River.	
Louisiana, State of :	
Assent of Congress to State legislation for removal of Red River raft-----	142
Canal, etc., routes along coast. <i>See</i> Canals, Mexico, Gulf of, and Rio Grande River.	
Proceeds of sales of lands to be applied to certain internal improve- ments-----	92
Louisville, Ky. <i>See</i> Ohio River.	
Louisville and Portland Canal, Ky. <i>See</i> Falls at Louisville, etc., under Ohio River.	
Louisville and Portland Canal Company. <i>See</i> Falls at Louisville (Louis- ville and Portland Canal), under Ohio River.	
Loutre, Pass a, Mississippi River. <i>See</i> Loutre, Pass a, and Passes, under Mississippi River.	
Lovejoys Narrows, Kennebec River, Me. <i>See</i> Kennebec River.	
Lovells Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Lower Cedar Point, Potomac River, Md. <i>See</i> Potomac River.	
Lower Klamath Lake, Oreg. and Cal., changing of level-----	1066
Lower Machodoc Creek, or River, Va. :	
Examination and survey-----	528
Improvement-----	626, 693, 768, 866, 977
Lower Thoroughfare, Deal Island, Md. <i>See</i> Deal Island.	
Lubec Channel, Me. :	
Examinations and surveys-----	280, 590
Improvement-----	296, 307, 338, 366, 401, 444, 494, 689, 762, 861, 973
Ludington (Pere Marquette) Harbor, Mich. :	
Acceptance of land by U. S-----	491
Effect of wave action, with plans for overcoming same-----	1108
Examinations and surveys-----	386, 800, 1108
Improvement-----	163, 176, 177, 182, 191, 202, 212, 227, 237, 255, 272, 292, 310, 337, 365, 400, 441, 491, 620, 686, 757, 858, 967, 1039, 1107, 1252
Ludlam Bay, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Lumber River, N. C. and S. C. :	
Examination and survey-----	467
Improvement-----	500, 564, 627, 694
Lumberton Branch, Rancocas River, N. J. <i>See</i> Rancocas River.	
Lynch River, S. C. :	
<i>See also</i> Clark Creek, or River.	
Examinations and surveys-----	325, 648, 900
Improvement-----	1234
Lyndon, Ill. <i>See</i> Rock River..	
Lynn Harbor, Mass. :	
<i>See also</i> Saugus River.	
Examinations and surveys-----	353, 799, 915, 1275
Improvement-----	380, 436, 484, 546, 612, 678, 745, 951, 1081, 1203

Lynnhaven Bay, Va.:	Page.
Examinations and surveys-----	298, 607
Waterway to Eastern Branch, Elizabeth River, examination and survey -----	595
Lyons & Howard, payment to-----	92, 130
Lyons Creek, Va., examination and survey-----	720

M.

McAlester (dredge), relief of families of persons lost with-----	284
McCafferty, Charles, claim of-----	383, 471, 472
McClellanville, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Waterway from Charleston to Santee River and opposite (via Alligator Creek, or River, Bulls Bay, and Wando and Owendaw rivers), examination and survey between Alligator Creek and Charleston-----	900
Waterway from Charleston to Santee River and opposite (via Alligator Creek, or River, Bulls Bay, and Wando and Owendaw rivers), examination and survey for extension of Estherville-Minim Creek Canal to Alligator Creek-----	900
Waterway from Charleston to Santee River and opposite (via Alligator Creek, or River, Bulls Bay, and Wando and Owendaw rivers), examination and survey of Alligator Creek and other waters connecting Santee River and Bulls Bay-----	468
Waterway from Charleston to Santee River and opposite (via Alligator Creek, or River, Bulls Bay, and Wando and Owendaw rivers), examination and survey of Owendaw and Wando rivers and other waters connecting Bulls Bay and Charleston-----	526
Waterway from Charleston to Santee River and opposite, extension of, to Morrisons Landing, in-----	1234
Waterway from Charleston to Santee River and opposite (via Alligator Creek, or River, Bulls Bay, and Wando and Owendaw rivers), improvement-----	958, 1234
McGlinchy & Co., Hugh, payment to J. C. Dennis, assignee of-----	214
McHenry, Ill. <i>See</i> Fox River, Ill. and Wis.	
Machias River, Me.:	
Examinations and surveys-----	208, 722, 798
Improvement-----	217, 232, 242
Machodoc creeks, or rivers, Va. <i>See</i> Lower Machodoc and Upper Machodoc creeks.	
Macintyre River, Me. <i>See</i> Cape Small Harbor.	
Mackeys Creek, N. C.:	
Examinations and surveys-----	209, 525
Improvement-----	564
Mackinac Island Harbor, Mich., examinations and surveys----	299, 420, 466, 897
Mackinac Strait, Mich., ship channel in waters connecting Great Lakes between Chicago, Duluth, and Buffalo. <i>See</i> Northern and Northwestern Lakes.	
Mackinaw Harbor, Mich., examination and survey-----	420
Macks Point, Penobscot Bay, Me. <i>See</i> Penobscot Bay.	
McNeill, William Gibbs, payment to-----	90
Macon Bayou, La. and Ark.:	
Examinations and surveys-----	325, 714
Improvement-----	407, 451, 502, 569, 632, 697, 773, 871, 983, 1098, 1242
MacRae Company, Hugh. <i>See</i> Hugh MacRae Company.	
Madison Harbor, Conn., examinations and surveys-----	353, 385
Madison Harbor, Ind. <i>See</i> Ohio River.	
Madre, Laguna, Tex. <i>See</i> Laguna Madre.	
Mahoning River, Ohio and Pa., canal via (Lake Erie and Ohio River Ship Canal)-----	1207
Mahon River, Del., examinations and surveys-----	519, 715, 920
Mailboat Slough, Wash. <i>See</i> Willapa Bay, Harbor, and River.	
Maine, State of, tonnage duties for repairing pier in Kennebunk River.	17
Main Ship channel, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	

Maintenance of rivers and harbors. <i>See</i> Arrearages, Examinations and surveys, <i>and</i> Preservation and repairs.	Page.
Malagay, La. <i>See</i> Chevreuil Bayou.	
Malden River, Mass.:	
Examinations and surveys-----	324, 522, 590
Improvement-----	379, 623, 689, 763, 862, 925, 973, 1082, 1222
Mamaroneck Harbor, N. Y.:	
Examination and survey-----	355
Improvement-----	380, 749, 849, 954, 1084
Manasquan River, N. J.:	
Examination and survey-----	279
Improvement-----	295, 312, 367, 559, 804
Manatee River, Fla.:	
Examinations and surveys-----	354, 1012
Improvement, including Terraceia Cut-off-----	380, 450, 501, 566, 629, 695, 727, 771, 869, 981, 1094, 1238
Manatee (steamer), payment to Independent Line Steamers for damage to-----	1028, 1071, 1072
Manchac Bayou, La.:	
Examinations and surveys-----	327, 521
Improvement-----	502, 568, 631, 697, 773, 871, 983, 1097, 1242
Manchac Pass, La.:	
Examinations and surveys-----	327, 1274
Examination and survey of channels in Lake Pontchartrain to-----	1273, 1274
Manchester Harbor, Mass.:	
Examinations and surveys-----	466, 716, 745, 799
Improvement-----	485, 547, 612, 745, 845, 951
Mandeville, La. <i>See</i> Pontchartrain Lake.	
Manistee Harbor and River, Mich.:	
Examinations and surveys-----	156, 1128
Improvement-----	162, 182, 191, 202, 212, 227, 237, 255, 272, 292, 310, 337, 365, 400, 442, 491, 553, 619, 686, 756, 857, 967, 1108, 1252
Manistique Harbor and River, Mich.:	
Examinations and surveys-----	219, 300, 1016
Improvement-----	310, 337, 1107, 1251
Manitowoc Harbor and River, Wis.:	
Effect of wave action, with plans for overcoming same-----	1108
Examinations and surveys-----	737, 901, 919, 969, 1108
Improvement-----	121, 154, 162, 171, 175, 176, 177, 181, 190, 212, 227, 236, 258, 271, 292, 310, 337, 365, 400, 442, 492, 554, 620, 687, 757, 860, 969, 1110, 1257
Mankato, Minn. <i>See</i> Minnesota River.	
Manokin River, Md.:	
Examinations and surveys-----	387, 521
Improvement-----	562, 625, 692, 767, 865, 1088, 1230
Mantua Creek, N. J.:	
Examinations and surveys-----	352, 718, 800
Improvement-----	380, 864, 975, 1228
Maps. <i>See</i> Illustrations.	
Maquam Bay and Harbor, Vt. <i>See</i> Swanton Harbor.	
Maramec (Meramec) River, Mo. <i>See</i> Meramec River.	
Marblehead Neck, Mass. <i>See</i> Marblehead Harbor.	
Marblehead Harbor, Mass.:	
Examinations and surveys-----	30, 420, 799, 951
Improvement-----	123, 845, 951
March Hope Creek (Northwest Fork of), Nanticoke River, Del. <i>See</i> Nanticoke River.	
Marcushook Harbor, Pa. <i>See</i> Delaware Bay and River.	
Mare Island Strait, Cal., examination and survey-----	797
Mariana Islands. <i>See</i> Guam Island <i>and</i> San Luis d'Apra Harbor.	
Marine commerce, levying of tolls on. <i>See</i> Tolls.	
Marine Hospital of Pennsylvania, acquisition by U. S. of title to Presque Isle peninsula, at Erie-----	200, 438
Marine-Hospital Service, U. S. <i>See</i> Public Health and Marine-Hospital Service.	

Marquette Bay and Harbor, Mich. :	Page.
Harbor, examination and survey-----	155
Harbor improvement-----	161,
176, 177, 181, 190, 202, 211, 227, 236, 255, 270, 291, 310, 365,	
400, 442, 491, 554, 620, 686, 757, 858, 968, 1039, 1106,	1251
Harbor of refuge, examinations and surveys-----	738, 1016
Harbor of refuge, improvement-----	757, 858, 968, 1106
Marshfield, Mass. <i>See</i> Scituate Harbor.	
Marshfield, North, Mass. <i>See</i> Scituate Harbor.	
Marshfield, Oreg. <i>See</i> Coos Bay, Harbor, and River.	
Marsh River, Me. (South Branch of the Penobscot), examinations and surveys at Frankfort-----	794, 1128
Marthas Vineyard, Mass. <i>See</i> Cottage City, Edgartown and Menemsha Bight harbors, Middle Ground shoal, Nantucket Sound, Squash Meadow shoals, and Vineyard Haven Harbor and Sound.	
Maryland, State of, tonnage duties at Baltimore Harbor-----	15, 16 ² ,
17, 20 ² , 24, 41, 83, 97, 116, 140	
Marysville, Cal. <i>See</i> Feather River.	
Massachusetts Bay, Mass. <i>See</i> Boston Harbor.	
Massachusetts, State of :	
Expenditure of improvement funds for Dorchester Bay and Neponset River conditioned upon certain work by-----	1221
Expenditure of improvement funds for Essex River conditioned upon financial contribution by-----	1221
Expenditure of improvement funds for Town and Weymouth Fore rivers conditioned upon certain future maintenance thereon by-----	1082 ² , 1083
Tonnage duties for repairing pier in Kennebunk River (Me)-----	17
Massapequa Creek, N. Y., examination and survey of channel to-----	1277
Massena, N. Y. <i>See</i> Grass River.	
Matagorda, Tex. <i>See</i> Matagorda Bay.	
Matagorda Bay, Tex. :	
<i>See also</i> Cavallo Pass.	
Alligator Head, channel from Gulf of Mexico to, examination and survey-----	900
Entrance to, and channel to Indianola, examination and survey----	219
Indianola Harbor, examination and survey-----	186
Lavaca Bay, channel to, examination and survey-----	1020
Matagorda, channel to, examination and survey-----	1132
Palacios, on Tres Palacios Bay, channel to, examination and survey-----	1279
Port Lavaca, on Lavaca Bay, channel to Pass Cavallo, examination and survey-----	1279
St. Marys Bayou, mouth of, near Matagorda, examination and survey-----	353
Waterway from the Rio Grande to Mississippi River. <i>see</i> Rio Grande River.	
Matagorda Inlet (Pass Cavallo), Tex. <i>See</i> Cavallo Pass.	
Matanzas River, Fla. <i>See</i> St. Augustine Harbor.	
Matawan Creek, N. J. :	
<i>See also</i> Keyport Harbor.	
Examination and survey-----	324
Improvement-----	349, 367, 560, 625, 690, 765, 863, 975, 1087, 1228
Materials and plant :	
<i>See also</i> Appropriations, Contracts, Dredge boats, Property, Proposals, and Structures.	
Acquisition of, by direct purchase, by condemnation, or by donation, provision for-----	479
Bonds of contractors to cover payment of liabilities for-----	324,
352, 382, 383, 415, 463, 676, 1072	
Dredging plants, hiring of private, payment for, in customary manner or on reimbursement and percentage basis (<i>see also</i> Dredge boats)-----	1281
From bars and islands within river banks or adjacent to or near works may be taken and used for improvements-----	416
Moneys received from various sources, and not paid into Treasury, annual statement regarding-----	1205
Proposals and contracts, combination in single, of two or more separate works-----	580, 1006, 1122, 1270

Materials and plant—Continued.		Page.
Proposals received for, list of, with names of bidders, to be reported to Congress	155, 164	
Protection of persons furnishing. <i>See</i> Bonds, <i>supra</i> .		
Regulations governing speed, movement, etc., of vessels in canals and improved channels (general), to prevent injury to	711, 890, 1008, 1009, 1010	
Sale or transfer of, when not needed	1008	
Use or injury by private parties forbidden unless authorized	888, 889, 890, 893, 1010	
Matinicus (Island) Harbor, Me., examinations and surveys	120, 244, 466, 1274	
Mattaponi River, Va.:		
Examination and survey	235	
Improvement	321, 341, 403, 447, 496, 562, 626, 693, 768, 925, 1089, 1231	
Mattituck Bay and Harbor, N. Y.:		
Examination and survey	592	
Improvement	749, 849, 1084, 1224	
Mattox Creek, Va., examination and survey	469	
Maumee Bay, Ohio. <i>See</i> Toledo Harbor.		
Maumee River, Ohio:		
<i>See also</i> Toledo Harbor.		
Above Toledo, examinations and surveys	195, 325	
Above Toledo, improvement	203	
Maurice River, N. J.:		
Examinations and surveys	352, 898, 1130	
Improvement	380, 402, 445, 495, 559	
Mayaguez Harbor, P. R.:		
<i>See also</i> Porto Rico.		
Examinations and surveys	1133	
May, Cape, N. J. <i>See</i> Cape May.		
Maysville, Ky. <i>See</i> Ohio River.		
Meadow River, W. Va., examination and survey	469	
Mean low water, depths referred to	884, 1005, 1121, 1270	
Medomac River, Me., examinations and surveys	523, 1015	
Meekers Island, Mississippi River, Minn. <i>See</i> St. Paul to Minneapolis, under Mississippi River.		
Meherrin River, N. C.:		
Examinations and surveys	355, 1131	
Improvement	370, 1233	
Memphis, Tenn. <i>See</i> Mississippi and Wolf rivers.		
Mendocino Harbor, Cal., examination	714	
Mendota Lake, Wis., survey (under Rock River)	88	
Menemsha Bight Harbor, Mass.:		
Examinations and surveys	466, 590	
Examination for harbor of refuge (under Vineyard Sound)	953	
Menemsha Harbor, Mass. <i>See</i> Menemsha Bight Harbor.		
Menominee Harbor and River, Mich. and Wis.:		
Harbor, examinations and surveys	165, 528, 800, 1275	
Harbor, improvement	191, 202, 211, 227, 236, 255, 270, 291, 310, 337, 366, 400, 442, 492, 686, 757, 858	
Harbor and river, improvement	968, 1109, 1251	
River, examination and survey	901	
River, improvement	573, 635, 702, 779, 878	
Menominee Indian Reservation, Wis., improvement of Oconto River and tributaries across, by Northwestern Improvement Co.	254	
Menominee Indians, rights of, in connection with improvement of Oconto River and tributaries by Northwestern Improvement Co.	254	
Menominee River, Mich. and Wis. <i>See</i> Menominee Harbor and River.		
Menominee River, Milwaukee, Wis. <i>See</i> Milwaukee Bay, Harbor, and River.		
Meramec Highlands, Mo. <i>See</i> Meramec River.		
Meramec River, Mo.:		
Discharge of water from Missouri River into, near Meramec Highlands	946	
Examination and survey	327	
Merced River, Cal., examination and survey	643	
Mercer County reservoir, Ohio. <i>See</i> Miami and Erie Canal,		

	Page.
Mermentau River, La.:	
Examination and survey, including course through Lake Arthur, Grand Lake, and White Lake, to the Gulf-----	1127
Examination and survey, including tributaries and course through Lake Arthur and Grand Lake, to the Gulf-----	589
Improvement, including tributaries-----	632, 698, 773, 872, 983, 1097, 1242
Locks and dam of Rice Irrigation and Improvement Association----	1032
Waterway to Franklin, examination and survey, in connection with route from the Rio Grande to the Mississippi (<i>see also</i> Rio Grande River)-----	1127
Waterway to Franklin, improvement-----	1242
Mermenton (Mermentau) River, La. <i>See</i> Mermentau River.	
Merrimac River, Mass. and N. H.:	
<i>See also</i> Newburyport Harbor.	
Haverhill, Mass., to mouth, examinations and surveys-----	973, 1082, 1275
Haverhill, Mass., to Newburyport, examinations and surveys--	210, 679, 763
Improvement-----	43, 52, 56, 64, 66, 96, 184, 194, 208, 218, 232, 242, 275, 285, 311, 338, 366, 401, 558, 623, 679, 763, 862, 973, 1082
Lawrence, Mass., to Manchester, N. H., examination and survey-----	353
Lowell, Mass., to New Hampshire State line, examination and survey-----	799
Mouth, examinations and surveys-----	34, 1082
Mesquite Bay, Tex.:	
Channel from Aransas Pass to Guadalupe River. <i>See</i> Aransas Bay, Harbor, and Pass.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Messina, N. Y. <i>See</i> Grass River.	
Metals, precious, mining for, in Bering Sea, Alaska-----	910, 911
Meto, Big Bayou, Ark. <i>See</i> Big Bayou Meto.	
Metropolis, Ill. <i>See</i> Ohio River.	
Mexico Bay, Lake Ontario, N. Y., examination-----	646
Mexico, Gulf of:	
<i>See also</i> Canals, etc.	
Canal across Florida, and thence along coast to Mississippi River, survey-----	245
Canal across Florida to the Atlantic, examinations and surveys--	30,
54, 124, 245, 280, 328	
Deep-water harbor on northwest coast, survey-----	539
Transportation routes to the seaboard, survey-----	233
Water hyacinths in tributaries. <i>See</i> Water hyacinths.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Mexico, Republic of, waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Miami, Fla. <i>See</i> Biscayne Bay.	
Miami, Mo. <i>See</i> Missouri River.	
Miami and Erie Canal, Ohio:	
Examinations and surveys-----	329, 701, 729, 819
Grant to State of Indiana of lands in Ohio in aid of Wabash and Erie section of-----	39, 68
Grant to State of Ohio of land at Mercer County and Loramie reservoirs-----	1068
Miami Extension Canal, Ohio. <i>See</i> Miami and Erie Canal.	
Mianus Harbor and River, Conn. <i>See</i> Coscob Harbor.	
Michigan City Harbor, Ind.:	
Expenditure of Government funds contingent upon amount expended by Michigan City Harbor Company-----	154, 163
Inner harbor, improvement-----	78, 79, 84, 101, 121, 128, 154, 163, 171, 175, 176, 177, 271, 309, 336, 364, 399, 441, 490, 553, 619, 685, 756, 856
Inner and outer harbors, improvement-----	966, 1111, 1259
Outer harbor, improvement-----	181, 192, 202, 212, 227, 237, 259, 271, 292, 309, 336, 364, 399, 441, 490, 553, 619, 685, 755, 856, 929
Use of foundations of old piers by Michigan City Harbor Co-----	147
Michigan City Harbor Company. <i>See</i> Michigan City Harbor.	

Michigan Lake:	Page.
<i>See also</i> Northern and Northwestern Lakes.	
Anchorage grounds and movement of vessels in Chicago Harbor and adjacent waters of-----	657
Calumet River, Ind., to, via Berry Lake, canal, examination and survey-----	520
Chicago Drainage Canal, Ill. <i>See</i> Sanitary District of Chicago.	
Chicago Harbor, Ill., extension of water pipes into. <i>See</i> Chicago Harbor and River.	
Chicago Harbor, Ill., and adjacent waters of, anchorage grounds and movement of vessels-----	657
Des Plaines River, Ill., canal to. <i>See</i> Mississippi River, <i>infra</i> , and Des Plaines River, Illinois and Michigan Canal, and Sanitary District of Chicago.	
Dredge boats, appropriation for-----	92, 122, 129
Dredge boat for harbors on east shore, transfer of, for general use on-----	1108
Fox River, Wis., to Rock River. <i>See</i> Fox River.	
Gary Harbor, Ind., filling at, and construction of wharves, etc., by private parties (<i>see also</i> Gary Harbor)-----	1163
Harbors on, improvement-----	144, 145
Illinois and Michigan Canal. <i>See</i> Illinois and Michigan Canal.	
Illinois River, Ill., canal to. <i>See</i> Mississippi River, <i>infra</i> , and Illinois and Michigan Canal, and Illinois River.	
Indiana Harbor, Ind., filling at, and construction of wharves, etc., by private parties (<i>see also</i> Indiana Harbor)-----	1178
Milwaukee and Rock River Canal, Wis. <i>See</i> Milwaukee and Rock River Canal.	
Mississippi River to, via Fox and Rock rivers. <i>See</i> Fox River.	
Mississippi River to, via Fox and Wisconsin rivers. <i>See</i> Fox and Wisconsin rivers.	
Mississippi River at mouth to, via Illinois and Des Plaines rivers, survey, including report on water power and land drainage----	1261, 1262
Mississippi River at St. Louis, Mo., to, via Illinois and Des Plaines rivers, survey-----	995, 1261, 1262
Mississippi River to, via Illinois and Des Plaines rivers, examinations and surveys -----	381, 456, 457, 509 ² , 587, 793, 879, 914, 995, 1261, 1262
Mississippi River to, via Rock River to Milwaukee. <i>See</i> Milwaukee and Rock River Canal.	
Racine reef (near Racine), Wis. <i>See</i> Racine Harbor.	
Sturgeon Bay and Lake Michigan Canal, Wis. <i>See</i> Sturgeon Bay and Lake Michigan Canal.	
Wabash River, canal to, examination and survey-----	244
Wave action at certain harbors, effects of, with plans for overcoming same -----	826, 837 ² , 1108
Michigan Lake Superior Power Company:	
<i>See also</i> St. Marys River.	
Acquisition by U. S. of lands for, in re diversion of water from St. Marys River, Mich-----	1256
Authority for diversion of water from St. Marys River, Mich-----	991, 992 ²
Michigan, State of:	
Keweenaw Bay-Lake Superior waterway, grant of public lands for construction of-----	148, 158, 178, 189, 199, 220
Lac La Belle Canal, grant of public lands for construction of-----	157
Proceeds of sales of public lands to be applied to certain internal improvements-----	92
St. Marys Falls Canal, grant of public lands, including right of way, for construction of-----	117
St. Marys Falls Canal, lease of canal lands to State board of fish commissioners-----	395
St. Marys Falls Canal, settlement of claim of U. S. against-----	1158
St. Marys Falls Canal, transfer to United States-----	319
Middle Branch, Patapsco River, Md. <i>See</i> Baltimore Harbor.	
Middle Fork, Kentucky River, Ky. <i>See</i> Kentucky River.	
Middle Ground bar, Hampton Roads, Va. <i>See</i> Hampton Roads.	

Middle Ground shoal, Vineyard Sound, Mass., examination for harbor of refuge (under Vineyard Sound)-----	Page. 953
Middleport, Ohio. <i>See</i> Ohio River.	
Middle (Waters) River, Mass. <i>See</i> Waters River.	
Middle rock, New Haven Harbor, Conn. <i>See</i> New Haven Harbor.	
Middletown, N. Y., tunnel to New Utrecht-----	605
Midway Island, Pacific Ocean. <i>See</i> Welles Harbor.	
Mifflin, Fort, Pa. <i>See</i> Delaware Bay and River.	
Miles City, Mont. <i>See</i> Tongue River.	
Milford Harbor, Conn.:	
Examinations and surveys-----	209, 355, 893
Improvement-----	232, 241, 276, 307, 361, 485, 548, 953, 1084
Milford Haven Harbor, Va.:	
Examinations and surveys-----	384, 648, 724
Improvement-----	850, 922, 957
Millbridge, Me. <i>See</i> Narraguagus River.	
Mill Cove, Wickford, R. I. <i>See</i> Wickford Harbor.	
Mill Creek, Cincinnati, Ohio. <i>See</i> Cincinnati, under Ohio River.	
Mille Lacs Lake, Minn., examination for reservoir-----	794
Miller Bay, Lake Winnebago, Wis. <i>See</i> Fox River.	
Mill River, New Haven, Conn. <i>See</i> New Haven Harbor.	
Mill River, Southport, Conn. <i>See</i> Southport Harbor.	
Mill River, Stamford, Conn. <i>See</i> Stamford Harbor.	
Milneburg, La. <i>See</i> Pontchartrain Lake.	
Milton Harbor, N. Y., examination-----	718
Milton Point, N. Y. <i>See</i> Milton Harbor.	
Milwaukee and Rock River Canal, Wis., adjustment of claims and accounts of canal company-----	145
Milwaukee and Rock River Canal Company, claims and accounts of----	145
Milwaukee Bay, Harbor, and River, Wis.:	
Canal to Rock River. <i>See</i> Milwaukee and Rock River Canal.	
Harbor, examinations and surveys-----	79, 99, 326, 803, 920
Harbor, improvement-----	99 ² , 101, 121, 126, 145, 154, 176, 177, 181, 190, 212, 233, 237, 259, 271, 292, 310, 338, 366, 442, 492 ² , 541, 554, 621, 687, 758, 859
Harbor of refuge, examination and survey-----	326
Harbor of refuge, Fair Weather opening in breakwater not to be closed-----	1110
Harbor of refuge, improvement-----	339, 366, 400, 442, 492, 554, 620, 687, 757, 810, 858, 929
Harbor and harbor of refuge, improvement-----	968, 1110, 1256
Inner harbor (Milwaukee, Menominee, and Kinnickinnick rivers), examination and survey-----	1022
Inner harbor (Milwaukee, Menominee, and Kinnickinnick rivers), improvement-----	1110, 1212
Inner harbor (omission of turning basin at head of Kinnickinnick River)-----	1212
South Milwaukee Harbor. <i>See</i> South Milwaukee Harbor.	
Minge, Collier H., relief of-----	137
Mingo Creek, or River, S. C.:	
Examination and survey-----	468
Improvement-----	500, 565, 628, 694
Minim Creek-Estherville Canal S. C. <i>See</i> Santee River.	
Mining:	
For gold, etc., in Bering Sea, Alaska-----	910, 911
Hydraulic, in California. <i>See</i> California Débris Commission and California State.	
Rights of way for canals and various structures in forest reserves for purposes of-----	1063
Minisceongo Creek, or River, N. Y., examinations and surveys----	386, 1017, 1277
Minneapolis, Minn. <i>See</i> Mississippi River.	
Minneapolis Gas Light Company-----	675
Minnesota Point, Duluth-Superior Harbor, Minn. and Wis. <i>See</i> Duluth-Superior Harbor.	
Minnesota Power and Trolley Company, dam of-----	1044, 1146

Minnesota River, Minn. :		Page.
Belleplaine, examinations and surveys	328, 385, 717	
Division of flood waters of Red River of the North into, examination and survey of Bois de Sioux River, Lake Traverse, and Big Stone Lake for	1275	
Examination and survey (limits not defined)	467	
Improvement	163,	
183, 193, 204, 213, 229, 239, 256, 270, 508, 636, 780, 878, 993, 1111,	1259	
Mankato, examination and survey	717	
Mouth, removal of dam	993	
Mouth to South Bend, examination and survey	229, 234	
Mouth to Yellow Medicine River, examination and survey	156	
Reservoirs in Big Stone Lake, examinations and surveys (<i>see also</i> Red River of the North)	387, 717, 800, 879, 1016	
Reservoirs in Lake Traverse, examinations and surveys (<i>see also</i> Red River of the North)	800, 879, 1016	
St. Peter, examination and survey	897	
To be known and designated as, instead of St. Peters River	117	
Yellow Medicine River, above, survey	210	
Minnesota, State of :		
Formation of State government; certain proceeds of sales of lands to be applied to internal improvements	136	
Grant of public lands for lock and dam in Mississippi River at Meekers Island	170, 213	
Grant of public land (at Leech Lake) for sanitarium	1161	
Railroads granted right of way, etc., through water-reserve lands, Mississippi River and tributaries	251, 936	
Minnetonka Lake, Minn., survey for purposes of charting	1129	
Minnewaukon (Devils) Lake, N. Dak., examination and survey	586	
Minnewaukon shoals, Devils Lake, N. Dak., examination and survey	586	
Minnisceongo Creek, or River, N. Y. <i>See</i> Minnisceongo Creek, or River.		
Minton Point, Mississippi River, Ill. <i>See</i> Mississippi River.		
Mispillion Creek, or River, Del. :		
Examinations and surveys	277, 352, 586, 793, 913	
Improvement	294, 312, 341, 368, 496, 625, 691, 865, 925, 976, 1088, 1230	
Waterway to Broadkill Creek, via Cedar, Slaughter, and Primehook creeks, examination	643	
Mission Bay, Tex., channel from Aransas Pass to Guadalupe River. <i>See</i> Aransas Bay, Harbor, and Pass.		
Missisquoi Bay and River, Vt. <i>See</i> Missisquoi Bay and River.		
Missisquoi Bay and River, Vt., examinations and surveys	720, 803	
Mississippi bend, Ohio River. <i>See</i> Ohio River.		
Mississippi City Harbor, Miss., examination and survey	195	
Mississippi River :		
<i>See also</i> Western, etc., rivers.		
Adams's (M. J.) flume, test, etc., of	289, 381, 459, 637	
Alexandria Harbor, Mo., examination and survey	278	
Alexandria Harbor, Mo., improvement	321, 346	
Alluvial basin. <i>See also</i> Delta, <i>infra</i> .		
Alluvial basin, appropriations for improvement of river to be used in acquiring boats for relief of flood sufferers	541	
Alluvial basin, Cape Girardeau, Mo., to Head of Passes, use for levees from, of appropriations for improvement between Ohio River and Head of Passes, under Mississippi River Commission	1165, 1260	
Alluvial basin, reclamation, etc., from inundation, investigation concerning	226, 266	
Alton Harbor, Ill., examinations and surveys	185, 299	
Alton Harbor, Ill., improvement	316, 346, 382, 413, 460, 511, 577	
Alton, Ill., to Meramec River, Mo., examination and survey	185	
Alton, Ill., to Missouri River, examination and survey	299	
Andalusia, Ill., examination and survey	327	
Andalusia, Ill., improvement	349, 412	
Arkansas and Missouri rivers and. <i>See</i> Missouri and Arkansas rivers, etc., <i>infra</i> .		
Arkansas, Missouri, and Ohio rivers and. <i>See</i> Missouri, Ohio, and Arkansas rivers, etc., <i>infra</i> .		

Mississippi River—Continued.		Page.
Arkansas River and, improvement.....		268
Arsenal Island. <i>See</i> St. Louis Harbor, etc., <i>infra</i> .		
Ashport, Tenn., claim of John Conner, sr., for land, etc., for levee.....	1071, 1072 ²	
Ashport, Tenn., south to Fort Pillow and east to the high land, examination and survey.....		1131
Atchafalaya River, La., rectification of mouth, etc. <i>See</i> Atchafalaya River.		
Atchafalaya River, La., Berwick Bay, waterway to Texas and Mexico, via, shortening of route. <i>See</i> Black (tributary of Bayou Bœuf) and Terrebonne bayous.		
Atlantic seaboard to, canal, etc., along Gulf coast to and across Florida, survey.....		245
Atlantic seaboard to, transportation routes, surveys (<i>see also</i> Canals).....	233, 243	
Augusta, Minn., lock and dam of The St. Cloud Electric Power Company.....		1189
Balize, the, to Ohio River. <i>See</i> Ohio River to the Balize, <i>infra</i> .		
Barataria Bay, La., to New Orleans. <i>See</i> Barataria Ship Canal and New Orleans to the Gulf, <i>infra</i> .		
Barataria (Grand) Pass, La., to New Orleans. <i>See</i> Barataria Ship Canal and New Orleans to the Gulf, <i>infra</i> .		
Barataria Ship Canal, La., construction authorized.....		266
Baton Rouge Harbor, La., examinations and surveys.....	521, 715	
Baton Rouge Harbor, La., gauging. <i>See</i> Gauging, <i>infra</i> .		
Bay City, Wis., harbor of refuge, improvement.....		732
Bayou Sara Harbor, La., examination.....		715
Beaver Island, Clinton Harbor, Iowa. <i>See</i> Clinton Harbor, <i>infra</i> .		
Beechridge, Ill., prevention of break into Cache River, examination and survey.....		895
Beechridge, Ill., prevention of break into Cache River, improvement.....		814
Bell, Capt. Edward, process of wing-dam construction.....	260, 261	
Bellevue, Iowa, opposite (Crooked Slough dam, Ill.), examinations and surveys.....	644, 895	
Bemidji, Minn., dam of Kirby Thomas et al.....		1079
Bemidji, Minn., dam of Morrison and Haines.....		1167
Berwick Bay, Atchafalaya River, La., waterway to Texas and Mexico, via, shortening of route. <i>See</i> Black (tributary of Bayou Bœuf) and Terrebonne bayous.		
Bloody Island, St. Louis, Mo. <i>See</i> St. Louis, <i>infra</i> .		
Bloomington (Muscatine), Iowa. <i>See</i> Muscatine, <i>infra</i> .		
Boats, appropriations for improvement of river to be used in acquiring, for relief of flood sufferers.....		541
Boats, dredge, etc. <i>See</i> Dredges, etc., <i>infra</i> .		
Boats, tolls. <i>See</i> Tolls.		
Bolivar Lake front, Miss., improvement.....		512
Brainerd, Minn., dam, etc., of Mississippi Water Power and Boom Company.....		427
Brainerd, Minn., to Grand Rapids, improvement.....	996, 1112	
Brainerd, Minn., to Sandy Lake dam, surveys regarding floods.....	880, 996	
Bridges, placing of sheer booms on piers to facilitate rafting.....		253
Bridges, St. Paul to St. Louis, construction of railroad, with regard to interests of navigation.....		156
Brooklyn, Ill., examination and survey.....		279
Burlington Harbor, Iowa, including Rush Chute, improvement.....	259,	
	269, 290, 311, 576, 577	
Burlington, Iowa, to Iowa River. <i>See</i> Iowa River to Burlington, <i>infra</i> .		
Cahokia Chute. <i>See</i> St. Louis Harbor, etc., <i>infra</i> .		
Cairo, Ill., gauging. <i>See</i> Gauging, <i>infra</i> .		
Cairo, Ill., improvement.....		413, 460
Cairo, Ill., to Head of Passes. <i>See</i> Ohio River to Head of Passes, <i>infra</i> .		
Cairo, Ill., to mouth. <i>See</i> Ohio River to mouth, <i>infra</i> .		
Cairo, Ill., to St. Louis, Mo. <i>See</i> St. Louis, <i>infra</i> .		

Mississippi River—Continued.

Page.

Cannon River, Minn., reservoir. *See* Cannon River.Canton, Mo., to Des Moines River, Iowa. *See* Des Moines River to Canton, *infra*.

Cape Girardeau, Mo., improvement 321, 346, 460

Cape Girardeau, Mo., to Head of Passes, use for levees from, of appropriations for improvement between Ohio River and Head of Passes, under Mississippi River Commission 1165, 1260

Cape Girardeau, Mo., to mouth (alluvial region), investigation for reclamation, etc., from inundation 226, 266

Carondelet Canal, La., survey and improvement (*see also* St. John Bayou) 20Carrollton, La., gauging. *See* Gauging, *infra*.

Caruthersville Harbor, Mo., improvement 831, 842, 999

Cedar Creek (branch of Quincy Bay), Ill., mouth, improvement 511

Cedar River, Iowa, to, survey for canal 90

Chester Harbor, Ill., improvement 782

Chicago, Ill., to. *See* Des Plaines and Illinois rivers and Illinois and Michigan and Illinois and Mississippi canals.Chippewa River, Wis., reservoirs. *See* Chippewa River.Chippewa River, Wis., to Rollingstone, or Straight, Slough. *See* Rollingstone Slough, *infra*.

Clarksville Harbor, Mo., examination and survey 523

Clarksville Harbor, Mo., improvement 577, 637

Claryville, Mo., improvement 841

Clearwater, Minn., dam of The Mississippi River Power Company. 1176, 1284

Clinton Harbor, Iowa, head of Beaver Island, examination and survey 520

Clinton Harbor, Iowa, north of Little Rock Island, examination and survey 588

Clinton Harbor, Iowa, improvement 842

Columbus Harbor, Ky., improvement 413, 460, 461², 512Concordia Lake, La. *See* Natchez and Vidalia harbors, *infra*.Coon rapids to Minneapolis, Minn. *See* Minneapolis to Coon rapids, *infra*.Cowpen bend, Miss. *See* Natchez and Vidalia harbors, *infra*.Crains Island, Mo. *See* Missouri Chute, *infra*.

Cribbs for protection of mills and rafts against damage by floods and ice, construction of 220

Crooked Slough dam, Ill. *See* Bellevue, Iowa, *supra*.Dallas City, Ill., to Oquawka. *See* Oquawka to Dallas City, *infra*.Davenport Harbor, Iowa. *See also* Rock Island rapids, *infra*.

Davenport Harbor, Iowa, improvement 842, 997

Davenport Harbor, Iowa, water-power dam in Rock Island rapids. *See* Rock Island rapids, *infra*.Delta. *See also* Alluvial basin, *supra*.

Delta, survey for prevention of inundation and for deepening the passes 116, 125, 128

Delta Point, La., improvement 460, 461

Des Moines rapids, below, improvement 119

Des Moines Rapids Canal, enlargement of locks, examinations and surveys 907, 998

Des Moines Rapids Canal and dry dock, operating and care (permanent indefinite appropriation) 346, 584, 585

Des Moines Rapids Canal, operating and care (specific appropriation) 265, 277, 290, 317

Des Moines Rapids Canal and dry dock, regulations for use and administration of 416, 533, 584, 585

Des Moines Rapids Canal dry dock, construction authorized; uses defined; regulations governing use 377

Des Moines Rapids Canal dry dock to be considered an integrant part of canal 584, 585

Des Moines rapids, dam at foot, examination and survey 997

Des Moines rapids, dam, canal, lock, and dry dock of Keokuk and Hamilton Water Power Co. between Nauvoo and Hamilton (at Keokuk); lock and dry dock to supersede similar existing Government structures, and ownership to be in U. S. 934, 1043, 1064

Mississippi River—Continued.		Page.
Des Moines rapids, dam, etc., of Des Moines Rapids Power Co., between Nauvoo and Hamilton, Ill.-----		672
Des Moines rapids, including canal, improvement, release of contractors and sureties from liability on bond.-----		197
Des Moines rapids, including canal, dry dock, etc., improvement.---		119,
135, 152, 163, 169, 171, 175, 176, 177, 178, 183, 188, 193, 204,		
214, 229, 239, 256, 277, 290, 317, 346, 377 ² , 412 ² , 460 ² , 511 ² , 577		
Des Moines rapids to Illinois River, appropriations not to be expended for levees, except to improve navigation.-----		382, 413
Des Moines rapids to Illinois River, improvement.-----		290,
317, 346, 382, 413 ² , 460, 511, 577		
Des Moines rapids to Minneapolis, Minn. <i>See</i> Minneapolis to Des Moines rapids, <i>infra</i> .		
Des Moines rapids to Ohio River, improvement.-----		269
Des Moines rapids to St. Paul, Minn. <i>See</i> St. Paul to Des Moines rapids, <i>infra</i> .		
Des Moines River, Iowa, to Canton, Mo., including Egyptian levee, survey.-----		784
Dickey Island to Ohio River. <i>See</i> Ohio River to Dickey Island, <i>infra</i> .		
Discharge measurements. <i>See</i> Gauging, <i>infra</i> .		
Donaldsonville, La., waterway to Rio Grande River, Tex., examinations and surveys.-----		219, 1127
Donaldsonville, La., waterway to Rio Grande River, Tex., via Berwick Bay, shortening of route. <i>See</i> Black (tributary of Bayou Bœuf) and Terrebonne bayous.		
Donaldsonville, La., waterway to Sabine Pass, Tex., examination and survey.-----		1127
Dredges and snag boats in lower river, operation of (permanent annual appropriation); itemized statements of expenditures to accompany annual reports.-----		516
Dredges and snag boats in lower river, operation of (specific appropriations) -----		413, 461, 512
Dredges and snag boats in upper river, appropriation not to be expended for certain patents or patented machines.-----		193
Dredges and snag boats in upper river, operation of, availability of permanent annual appropriation for, for similar purposes on Illinois River -----		516, 1259
Dredges and snag boats in upper river, operation of (permanent annual appropriation); itemized statements of expenditures to accompany annual reports.-----		516
Dredges and snag boats in upper river, operation of (specific appropriations) -----		171, 175, 176, 177,
183, 193, 204, 214, 229, 239, 260, 277, 290, 317, 346, 377, 459, 510		
Dredges of Mississippi River Commission. <i>See</i> Ohio River to Head of Passes, <i>infra</i> .		
Dredges for outlets, or passes. <i>See</i> Passes, <i>infra</i> .		
Drury's Landing, Ill., to New Boston, survey.-----		783
Dubuque Harbor, Iowa, examination and survey.-----		103
Dubuque Harbor, Iowa, improvement.-----		103,
109, 123, 261, 269, 290, 317, 346, 379, 401, 460, 783, 813		
Duck Creek Chain, Rock Island rapids. <i>See also</i> Rock Island rapids, <i>infra</i> .		
Duck Creek Chain, Rock Island rapids, improvement.-----		459
Eads, James B., improvements at South Pass. <i>See</i> South Pass, <i>infra</i> .		
East St. Louis, Ill. <i>See</i> St. Louis Harbor, etc., <i>infra</i> .		
Egyptian levee. <i>See</i> Des Moines River to Canton, <i>supra</i> .		
Falls of St. Anthony, Minn. <i>See</i> St. Anthony Falls, <i>infra</i> .		
Fish bend, near Fort Chartres, Ill., examination and survey.-----		354
Flint Creek, Iowa, to Iowa River, improvement.---		732, 783, 813, 831, 841, 842
Flint Creek, Iowa, to Iowa River, survey.-----		704
Floods at the delta, investigation for prevention of.-----		116, 125, 128
Floods between Sandy Lake dam, Minn., and Brainerd. <i>See</i> Brainerd to Sandy Lake, <i>supra</i> .		
Floods in alluvial basin, investigation for prevention of.-----		226, 266

Mississippi River—Continued.	Page.
Floods, pier and crib constructions for protection of mills and rafts against -----	220
Flood sufferers, appropriations for improvement to be used in acquiring boats for relief of -----	541
Florida, canals to and across. <i>See</i> Atlantic seaboard, <i>supra</i> .	
Flowage lands. <i>See</i> Floods, <i>supra</i> , and Reservoirs, <i>infra</i> .	
Fort Madison Harbor, Iowa, improvement -----	259, 269, 290, 338, 412
Fort Pillow, Tenn., to Ashport. <i>See</i> Ashport, <i>supra</i> .	
Fort Snelling, Minn., to Rock Island rapids, improvement -----	163
Fort Snelling, Minn., to St. Anthony Falls. <i>See</i> St. Anthony Falls to Fort Snelling, <i>infra</i> .	
Fort Snelling, Minn., use, for public and private purposes, of surplus water not needed for navigation flowing over Government dams between St. Paul and Minneapolis -----	1187
Fountain City Harbor, Wis., improvement -----	997
Fox River, Wis., to. <i>See</i> Fox and Wisconsin rivers and Milwaukee and Rock River Canal.	
Freshets. <i>See</i> Floods, <i>supra</i> .	
Fulton County, Ky., to Lake County, Tenn. <i>See</i> Reelfoot levee district, <i>infra</i> .	
Galena, Ill., to St. Louis, Mo. <i>See</i> St. Louis, etc., <i>infra</i> .	
Gauging, at St. Paul, Minn., authorized, to be paid from appropriations for gauging the river and its principal tributaries -----	510
Gauging, including principal tributaries (permanent annual appropriation) ; itemized statements of expenditures to accompany annual reports -----	516, 1009
Gauging, including principal tributaries (specific appropriations) -- 261, 269, 289, 317, 346, 377, 394, 414, 461, 512, 535	189,
Grande, Rio, Tex., to, waterway. <i>See</i> Donaldsonville, <i>supra</i> .	
Grand Gulf Harbor, Miss., examination and survey -----	327
Grand Island, opposite La Crosse, Wis. <i>See</i> La Crosse, <i>infra</i> .	
Grand Pass, La., to New Orleans. <i>See</i> Barataria Ship Canal, <i>supra</i> , and New Orleans to the Gulf, <i>infra</i> .	
Grand Rapids, Minn., dam of Grand Rapids Water Power and Boom Co -----	839, 906
Grand Rapids, Minn., to Brainerd. <i>See</i> Brainerd to Grand Rapids, <i>supra</i> .	
Green Bay and Mississippi Canal, Wis. <i>See</i> Fox and Wisconsin rivers.	
Greenleaf bend. <i>See</i> Beechridge, <i>supra</i> .	
Greenville Harbor, Miss., improvement ----- 460, 461, 512, 577, 638, 704, 785, 831, 842, 999	413,
Greenville reach, Miss. <i>See</i> Greenville Harbor, <i>supra</i> .	
Gulf of Mexico. <i>See</i> Mexico, Gulf of, <i>infra</i> .	
Gull Lake, Minn., reservoir. <i>See</i> Reservoirs, <i>infra</i> .	
Guttenberg, Iowa, examination and survey -----	419
Guttenberg, Iowa, improvement -----	317, 346
Hamburg Bay, Ill., examinations and surveys -----	464, 644, 1127
Hamburg Bay, Ill., improvement -----	460, 511
Hamburg Bay, Ill., included in general project for river improvement -----	997
Hamilton, Ill., to Nauvoo, water-power dams, etc. <i>See</i> Des Moines rapids, <i>supra</i> .	
Hamilton Slough, Hamilton, Ill., examinations and surveys -----	520, 587
Hannibal, Mo., improvement -----	322, 346, 638, 997
Hannibal, Mo., to La Grange. <i>See</i> La Grange to Hannibal, <i>infra</i> .	
Harbors under control of Mississippi River Commission, authority for allotment to, of funds from appropriations for improvement, etc., between Ohio River and Head of Passes -----	1114, 1261
Harrisonville Harbor, Ill., examination and survey -----	915
Head of Passes to Cape Girardeau, Mo. <i>See</i> Cape Girardeau to Head of Passes, <i>supra</i> .	
Head of Passes to headwaters, surveys. <i>See</i> Ohio River to Head of Passes, <i>infra</i> .	
Head of Passes to Ohio River (Cairo). <i>See</i> Ohio River to Head of Passes, <i>infra</i> .	

Mississippi River—Continued.		Page.
Headwaters to Head of Passes. <i>See</i> Ohio River to Head of Passes, <i>infra</i> .		
Helena Harbor, Ark., gauging. <i>See</i> Gauging, <i>supra</i> .		
Helena Harbor, Ark., improvement.....	512, 577, 785, 831, 842, 999	
Hennepin Canal, Ill. <i>See</i> Illinois and Mississippi Canal.		
Hickman Harbor, Ky., improvement.....	413, 460, 461 ² , 512, 577, 704	
Hickman, Ky., to Slough Landing, Tenn. <i>See</i> Reelfoot levee district, <i>infra</i> .		
Ice damage, pier and crib constructions for protection of mills and rafts against.....		220
Illinois and Mississippi Canal, Ill. <i>See</i> Illinois and Mississippi Canal.		
Illinois River to Des Moines rapids. <i>See</i> Des Moines rapids to Illinois River, <i>supra</i> .		
Illinois River to Missouri River, improvement.....		205
	229, 239, 261, 269, 289, 346	
Illinois River to Ohio River. <i>See</i> Ohio River to Illinois River, <i>infra</i> .		
Inundations. <i>See</i> Floods, <i>supra</i> .		
Iowa River, Iowa, to Burlington, examination and survey.....		644
Iowa River, Iowa, to Flint Creek. <i>See</i> Flint Creek to Iowa River, <i>supra</i> .		
Iowa River, Iowa, to Muscatine, survey.....		784
Islands 14 and 15 (near Kaskaskia), between, improvement.....		261,
	269, 289, 290	
Ivy Landing, Ill. <i>See</i> Rush Island bend, etc., <i>infra</i> .		
Kaskaskia, Ill., improvement.....	261, 269, 289, 290, 316	
Kaskaskia bend. <i>See</i> Kaskaskia, <i>supra</i> .		
Keokuk, Iowa. <i>See</i> Des Moines rapids, <i>supra</i> .		
Keokuk (Des Moines Rapids) Canal, Iowa. <i>See</i> Des Moines rapids, <i>supra</i> .		
Kings Coulee, Minn., harbor of refuge, improvement.....		783
La Crosse, Wis., West channel, at Grand Island, opposite, declared not navigable (relieving city of necessity of maintaining bridge)		936
La Crosse Harbor, Wis., examinations and surveys.....	720, 803	
La Crosse Harbor, Wis., improvement.....	783, 860	
La Grange, Mo., to Hannibal, survey.....	784	
Lake City, Minn., harbor of refuge, examinations and surveys.....	352, 1016	
Lake City, Minn., harbor of refuge, etc., improvement.....	379, 412, 443, 637	
Lake City, Minn., to Reeds Landing, harbor of refuge. <i>See</i> Kings Coulee, <i>supra</i> .		
Lake County, Tenn., to Fulton County, Ky. <i>See</i> Reelfoot levee district, <i>infra</i> .		
Lake Providence, La., gauging. <i>See</i> Gauging, <i>supra</i> .		
Le Claire, Iowa, water-power dam in Rock Island rapids. <i>See</i> Rock Island rapids, <i>infra</i> .		
Leech Lake, Minn., reservoir. <i>See</i> Reservoirs, <i>infra</i> .		
Liberty Island, Mo., improvement.....		239
Liberty reach, or bend. <i>See</i> Wagners Landing, <i>infra</i> .		
Little Falls, Minn., dams, etc., of Little Falls Water Power Company		429, 430
Little Rock Island, Iowa. <i>See</i> Clinton Harbor, <i>supra</i> .		
Log rafts, pier and crib constructions for protection of.....		220
Long Prairie River, Minn., reservoir, examination.....		920
Louisiana, Mo., examination and survey.....		327
Louisiana, Mo., improvement.....		349
Loutre, Pass a. <i>See also</i> Passes, <i>infra</i> .		
Loutre, Pass a, closing crevasse.....		807
Loutre, Pass a, closing crevasse, diversion of funds for survey of Southwest Pass.....		819
Loutre, Pass a, closing crevasse, liability of James B. Eads, etc.....		807
Loutre, Pass a, improvement, including construction of sill.....	131, 853, 929	
Loutre, Pass a, regulations respecting navigation, establishment of.....		224
Lower river, dredges and snag boats. <i>See</i> Dredges, etc., <i>supra</i> .		
Lower river, gauging. <i>See</i> Gauging, <i>supra</i> .		

Mississippi River—Continued.	Page.
Madison, Iowa, to Skunk River, survey	784
Meramec (Meramec) River, Mo. <i>See</i> Meramec River, <i>infra</i> .	
Materials from bars and islands within river banks or adjacent to or near works, taking of, for use in improvements	416
Meekers Island, Minn. <i>See</i> St. Paul to Minneapolis, <i>infra</i> .	
Memphis Harbor, Tenn. (Wolf River). <i>See</i> Wolf River.	
Memphis Harbor, Tenn., examinations and surveys	595, 648, 880
Memphis Harbor, Tenn., gauging. <i>See</i> Gauging, <i>supra</i> .	
Memphis Harbor, Tenn., improvement	273,
288, 309, 336, 382, 413 ² , 460, 461 ² , 638, 704, 785, 831 ² , 999	
Meramec River, Mo., to Alton, Ill. <i>See</i> Alton, <i>supra</i> .	
Meramec River, Mo., to Missouri River. <i>See</i> Missouri River to Meramec River, <i>infra</i> .	
Mexico, Gulf of, inland route along, to the Rio Grande. <i>See</i> Donaldsonville, <i>supra</i> .	
Mexico, Gulf of, canal, etc., to, and thence to and across Florida, survey	245
Mexico, Gulf of, transportation route to, survey (<i>see also</i> Canals, etc.)	233
Mexico, Republic of, inland route to. <i>See</i> Donaldsonville, <i>supra</i> .	
Michigan Lake, to mouth of, via Illinois and Des Plaines rivers, survey, including report on water power and land drainage	1261, 1262
Michigan Lake to, via Illinois and Des Plaines rivers, etc., examinations and surveys (<i>see also</i> Des Plaines and Illinois rivers and Illinois and Michigan Canal)	381,
456, 457, 509 ² , 587, 793, 879, 914, 995, 1261, 1262	
Michigan Lake to, via Illinois and Mississippi Canal. <i>See</i> Illinois and Mississippi Canal.	
Michigan Lake to, via Rock and Fox rivers. <i>See</i> Rock River.	
Michigan Lake to, via Rock River to Milwaukee. <i>See</i> Milwaukee and Rock River Canal.	
Michigan Lake to, via Wisconsin and Fox rivers. <i>See</i> Fox and Wisconsin rivers.	
Mille Lacs Lake, Minn., reservoir. <i>See</i> Mille Lacs Lake.	
Mill property along, pier and crib constructions for protection of	220
Milton, La., to Raleigh, improvement	479
Minneapolis, Minn., exchange of lands with city of, at Lock and Dam No. 1	1158
Minneapolis, Minn., pipes of Minneapolis Gas Light Co.	675
Minneapolis, Minn., St. Anthony Falls. <i>See</i> St. Anthony Falls, <i>infra</i> .	
Minneapolis, Minn., to Coon rapids, dams of Twin City Rapid Transit Co.	820, 907
Minneapolis, Minn., to Des Moines rapids, improvement	510, 576
Minneapolis, Minn., to Missouri River. <i>See</i> Missouri River to Minneapolis, <i>infra</i> .	
Minneapolis, Minn., to Ohio River. <i>See</i> Ohio River to Minneapolis, <i>infra</i> .	
Minneapolis, Minn., to St. Paul. <i>See</i> St. Paul to Minneapolis, <i>infra</i> .	
Minneapolis, Minn., use, for public and private purposes, of surplus water not needed for navigation flowing over Government dams at	1187
Minnesota River, slough at mouth, improvement	317
Minton Point, Ill., improvement	321, 346, 460
Mississippi River Commission. <i>See</i> Cape Girardeau to Head of Passes and Head of Passes to headwaters, <i>supra</i> , Ohio River to Head of Passes, <i>infra</i> , and Mississippi River Commission.	
Missouri and Arkansas rivers and, improvement	171,
175, 183, 193, 204, 211, 214, 229, 239, 261, 264, 289, 316, 339, 378	
Missouri and Ohio rivers and, improvement	59, 60 ² , 64, 67, 71, 82
Missouri Chute, Mo., examination and survey	1017
Missouri, Ohio, and Arkansas rivers and, improvement	96, 98, 100, 119, 152
Missouri River and, improvement	75, 82
Missouri River, above and below, dredges and snag boats, etc. <i>See</i> Dredges, etc., <i>supra</i> .	

Mississippi River—Continued.		Page.
Missouri River, opposite mouth, improvement	413, 460, 511, 577, 782, 841	
Missouri River to Alton, Ill. <i>See</i> Alton to Missouri River, <i>supra</i> .		
Missouri River to Illinois River. <i>See</i> Illinois River to Missouri River, <i>supra</i> .		
Missouri River to Meramec River, improvement		205
Missouri River to Minneapolis, Minn., improvement		637,
	668, 669, 703, 704, 725, 732, 1263	
Missouri River to Minneapolis, Minn., preference in selection of harbors or landing places to be dredged to be given to localities that will maintain such work without cost to U. S.		1263
Missouri River to New Orleans, La., improvement		27
Missouri River to Ohio River, examination and survey		209
Missouri River to Ohio River, improvement		214,
	229, 239, 261, 269, 289, 637, 668, 669, 725, 732, 781, 782 ² , 813, 817, 831, 841, 931, 998, 999, 1040, 1059, 1113, 1135, 1198, 1261	
Missouri River to Ohio River, payment to private parties for materials and labor at Sawyers bend		998, 1135
Missouri River to Ohio River, use of dredges of Mississippi River Commission		999
Missouri River to Ohio River, use of movable jetties or steel caissons, etc., in removing bars		732, 782
Missouri River to St. Paul, Minn. <i>See</i> St. Paul to Missouri River, <i>infra</i> .		
Moline Harbor, Ill., examinations and surveys		520, 644, 1013
Moline Harbor, Ill., improvement		1113, 1203, 1293
Montana (Minton) Point, Ill. <i>See</i> Minton Point, <i>supra</i> .		
Monticello, Minn., above, dam of The Mississippi River Power Co		1174, 1283
Montrose Harbor, Iowa, improvement		576, 577
Morrison County, Minn., dam of The Pike Rapids Power Co		1165, 1282
Moscow, Iowa, survey for canal to		90
Mouths, or passes. <i>See</i> Delta, <i>supra</i> , and Passes, <i>infra</i> , and each particular pass, under this heading.		
Mouth to Cape Girardeau. <i>See</i> Cape Girardeau to mouth, <i>supra</i> .		
Mouth to New Orleans, La. <i>See</i> New Orleans to mouth, <i>infra</i> .		
Mouth to Ohio River. <i>See</i> Ohio River to mouth, <i>infra</i> .		
Mouth to St. Louis, Mo., and thence to Lake Micaigan. <i>See</i> St. Louis, <i>infra</i> .		
Muscatine (Bloomington) Harbor, Iowa, improvement		295,
	311, 338, 366, 412, 813, 997	
Muscatine (Bloomington), Iowa, to Cedar River, survey for canal		90
Muscatine (Bloomington), Iowa, to Iowa River. <i>See</i> Iowa River to Muscatine, <i>supra</i> .		
Napoleon, Ark., gauging. <i>See</i> Gauging, <i>supra</i> .		
Natchez Harbor, Miss., improvement		320,
	346, 382, 413, 577, 638, 704, 785, 880, 999	
Natchez Harbor, Miss., survey		306
Nauvoo, Ill., to Hamilton, water-power dams, etc. <i>See</i> Des Moines rapids, <i>supra</i> .		
New Boston, Ill., to Drury's Landing. <i>See</i> Drury's Landing to New Boston, <i>supra</i> .		
New Madrid Harbor, Mo., improvement		577, 638, 704, 785, 831, 832, 842, 999
New Orleans Harbor, La., improvement		271,
	288, 309, 335, 382, 413, 460, 461 ² , 512, 577, 638, 704, 785, 880, 999	
New Orleans Harbor, La., survey		271
New Orleans, La., to the Gulf (Grand Pass), via Baratania Bay, etc., examination and survey		326
New Orleans, La., to the Gulf, via Baratania Ship Canal. <i>See</i> Baratania Ship Canal, <i>supra</i> .		
New Orleans, La., to Lake Pontchartrain (Carondelet Canal). <i>See</i> Carondelet Canal, <i>supra</i> , and St. John Bayou.		
New Orleans, La., to Missouri River. <i>See</i> Missouri River to New Orleans, <i>supra</i> .		
New Orleans, La., to mouth, improvement (<i>see also</i> Missouri, Ohio, and Arkansas rivers, etc., <i>supra</i>)		

Mississippi River—Continued.

Page.

New Orleans, La., to Ohio River. *See* Ohio River to New Orleans, *infra*.

Ohio River, above mouth of, improvement----- 75, 82, 86

Ohio River, at mouth. *See* Cairo, *supra*.

Ohio River and, improvement----- 35, 44, 51, 53, 57, 60⁴, 69, 75⁴

Ohio and Missouri rivers and. *See* Missouri and Ohio rivers, etc., *supra*.

Ohio, Missouri, and Arkansas rivers and. *See* Missouri, Ohio, and Arkansas rivers, etc., *supra*.

Ohio River to the Balize (mouth), survey, maps, and charts----- 22

Ohio River to Des Moines rapids. *See* Des Moines rapids to Ohio River, *supra*.

Ohio River to Dickey Island, improvement----- 261, 269, 289

Ohio River to Head of Passes, appropriations for improvement, etc., authority for allotment of, to works now under way or hereafter to be undertaken at special localities----- 1114, 1261

Ohio River to Head of Passes, appropriations for improvement, etc., use of, in acquiring boats for relief of flood sufferers----- 541

Ohio River to Head of Passes, appropriations for improvements, etc., not to be expended with a view to benefiting private property----- 340, 382, 393, 413, 460, 512, 609, 610

Ohio River to Head of Passes, improvement by Mississippi River Commission, including salaries, surveys between Head of Passes and headwaters for collection of physical data, etc----- 304, 331, 332, 340, 382, 391, 393², 413, 414, 425, 460, 461, 512², 534, 535, 577, 599, 607, 609, 638, 655, 669², 726, 733, 784, 808, 814, 817, 831, 842, 930, 998, 1041, 1056, 1060, 1114, 1136, 1204, 1260

Ohio River to Head of Passes, improvement by Mississippi River Commission, use of appropriations for, upon levees between Head of Passes and Cape Girardeau, Mo----- 1165, 1260

Ohio River to Head of Passes, minimum channel dimensions for project to be 250 feet wide and 9 feet deep----- 785, 999, 1114, 1261

Ohio River to Head of Passes, use, for South Pass, of dredges or tugs of Mississippi River Commission----- 926, 962

Ohio River to Head of Passes, use, upon section between the Missouri and the Ohio, of dredges of Mississippi River Commission----- 999

Ohio River to Illinois River, appropriations not to be expended for levees, except to improve navigation----- 382, 413

Ohio River to Illinois River, improvement----- 229, 239, 261, 269, 289, 316, 346, 382, 413², 460, 511, 577

Ohio River to Minneapolis, Minn., improvement----- 637, 668, 669, 725, 731, 929, 941, 1026, 1037, 1040², 1059², 1135, 1136, 1203

Ohio River to Missouri River. *See* Missouri River to Ohio River, *supra*.

Ohio River to mouth, survey----- 22

Ohio River to New Orleans, improvement----- 57, 75², 81, 86

Ohio River to St. Louis, Mo. *See* St. Louis, *infra*.

Ohio River to St. Paul, Minn., improvement----- 781, 782, 783, 784, 813², 817², 831², 841², 931

Ohio River, tributaries northwest of. *See* Western, etc., rivers.

Oquawka, Ill., to Dallas City, survey----- 783

Otsego, Minn., dam, etc., of Minnesota Power and Trolley Co----- 1044, 1146

Outlets. *See* Delta, *supra*, and Passes, *infra*, and each particular pass, under this heading.

Overflows. *See* Floods, *supra*, and Reservoirs, *infra*.

Palmyra Lake, La., mouth, examination and survey----- 388

Pass a Loutre. *See* Loutre, Pass a, *supra*, and Passes, *infra*.

Passes. *See also* Delta, *supra*, and each particular pass, under this heading.

Passes, construction and operation of dredges, appropriation for- 853, 924, 929

Passes, examinations and surveys----- 48, 78, 116, 125, 128, 235

Passes, Head of, to Ohio River (Cairo). *See* Ohio River to Head of Passes, *supra*.

Passes, improvement----- 78, 81, 119, 152, 163, 167, 171, 175, 176, 177, 183, 193, 205, 215, 222, 230, 240, 262

Mississippi River—Continued.		Page.
Passes, investigation for prevention of inundation and for deepening channels	116, 125, 128	
Passes, regulations respecting navigation, establishment of	224	
Pepin Lake, harbor of refuge at Bay City, Wis. <i>See</i> Bay City, <i>supra</i> .		
Pepin Lake, harbor of refuge at Kings Coulee, Minn. <i>See</i> Kings Coulee, <i>supra</i> .		
Pepin Lake, harbor of refuge at Lake City, Minn. <i>See</i> Lake City, <i>supra</i> .		
Pepin Lake, harbor of refuge at Stockholm, Wis. <i>See</i> Stockholm, <i>infra</i> .		
Pepin Lake, harbors of refuge, additional, examination	649	
Pepin Lake, harbor of refuge on east shore. <i>See</i> Pepin village, <i>infra</i> .		
Pepin village (east shore of Lake Pepin), Wis., harbor of refuge, examination and survey	901	
Pepin village (east shore of Lake Pepin), Wis., harbor of refuge, improvement	997, 1113	
Piers for protection of mills and rafts against damage by floods and ice, construction of	220	
Pike rapids, Minn., dam of The Pike Rapids Power Co.	1165, 1282	
Pine River, Minn., reservoir. <i>See</i> Reservoirs, <i>infra</i> .		
Plaquemine Bayou, La., lock at mouth. <i>See</i> Plaquemine Bayou.		
Pokegama Falls, Minn., reservoir. <i>See</i> Reservoirs, <i>infra</i> .		
Pontchartrain Lake, canal (Carondelet) to (<i>see also</i> St. John Bayou)	20	
Port Byron, Ill., improvement	576, 577	
Prairie du Chien, Wis., improvement	576	
Puckett Island, Mo. <i>See</i> Missouri Chute, <i>supra</i> .		
Quincy Bay, Ill., examinations and surveys	419, 715, 895, 1013	
Quincy Bay, Ill., improvement	346, 364, 413, 460, 511, 577, 638, 703, 783, 841, 997	
Quincy Bay, Ill., mouth of Cedar Creek. <i>See</i> Cedar Creek, <i>supra</i> .		
Quincy Bay, Ill., mouth of Whipple Creek. <i>See</i> Whipple Creek, <i>infra</i> .		
Quincy Bay, Ill., to main river, sloughs, channels, etc., examination and survey	577	
Quincy Bay, Ill., Willow Slough. <i>See</i> Willow Slough, <i>infra</i> .		
Quincy, Ill., to Sny Island levee, examination and survey	1013	
Quincy, Ill., to Warsaw. <i>See</i> Warsaw to Quincy, <i>infra</i> .		
Quincy Harbor, Ill., examinations and surveys	279, 1013	
Quincy Harbor, Ill., improvement	297, 317, 382, 413, 783, 841, 997	
Rafts, pier and crib constructions for protection of	220	
Raleigh, La., to Milton. <i>See</i> Milton to Raleigh, <i>supra</i> .		
Red Cedar River, Iowa, to, survey for canal	90	
Red River, La., rectification of mouth. <i>See</i> Red River.		
Red River, La., separation between, at present junction, and maintaining navigation between the same through Bayou Plaquemine or by canal, examination	704	
Red River Landing, La., gauging. <i>See</i> Gauging, <i>supra</i> .		
Reeds Landing, Minn., to Lake City, harbor of refuge. <i>See</i> Kings Coulee, <i>supra</i> .		
Reelfoot levee district (Lake County, Tenn., to Fulton County, Ky.), examination and survey	588	
Reelfoot levee district (Hickman, Ky., to Slough Landing, Tenn.), examination and survey	915	
Regulations and rules respecting navigation, etc. <i>See</i> Regulations, etc.		
Reservoirs at headwaters, appropriations not to be expended with a view to improvement of private property	412	
Reservoirs at headwaters, ditches between Gull and Round lakes and between Round and Long lakes	1263	
Reservoirs at headwaters, flowage lands, railroads granted right of way through, etc.	251, 532, 536, 936	
Reservoirs at headwaters, flowage lines, surveys	880, 996	
Reservoirs at headwaters, gauging at St. Paul, Minn., to determine discharge during operation of. <i>See</i> Gauging, <i>supra</i> .		

Mississippi River—Continued.

Page.

Reservoirs at headwaters, Gull Lake dam and reservoir, cession to U. S. free of charge of land and flowage rights for-----	1263
Reservoirs at headwaters, Gull Lake lands, certain, restored to public domain, subject to rights of flowage-----	1162
Reservoirs at headwaters, Gull Lake lands, deed of quitclaim to Gull River Lumber Co.-----	1067
Reservoirs at headwaters, Leech Lake, grant of land to State of Minnesota, subject to right of flowage-----	1161
Reservoirs at headwaters, operating and care under permanent indefinite appropriation-----	415, 703
Reservoirs at headwaters, regulations for use and administration of-----	510
Reservoirs at headwaters, including tributaries (Cannon River, Minn.). <i>See</i> Cannon River.	
Reservoirs at headwaters, including tributaries, claims, etc., of private parties, including Indians, for land or other property taken or damaged-----	324, 351 ² , 376, 703, 814, 880
Reservoirs at headwaters, including tributaries, examinations and surveys (<i>see also</i> Minnesota River and Red River of the North)-----	263, 280, 294, 329, 880, 996
Reservoirs at headwaters, including tributaries, improvement-----	324, 351, 376, 412, 459, 510, 576, 637, 703, 781, 814, 834, 879, 996, 1112, 1263 ²
Reservoirs at headwaters, including tributaries, land or other property needed in improvements, may be taken and used therefor-----	376
Reservoirs at headwaters, including tributaries (Long Prairie River, Minn.), examination-----	920
Reservoirs at headwaters, including tributaries (Mille Lacs Lake, Minn., headwaters of Rum River). <i>See</i> Mille Lacs Lake.	
Reservoirs at headwaters, including tributaries, restoration to public domain, subject to rights of flowage, etc., of certain lands heretofore withdrawn from market-----	544, 1076
Reservoirs at headwaters, including tributaries (Rock River, Wis.). <i>See</i> Rock River.	
Rio Grande River, Tex., to, waterway. <i>See</i> Donaldsonville, <i>supra</i> .	
Rock Island Harbor, Ill., improvement-----	322, 336, 783, 841
Rock Island Harbor, Ill., gauging. <i>See</i> Gauging, <i>supra</i> .	
Rock Island, Ill., to Hennepin, canal. <i>See</i> Illinois and Mississippi Canal.	
Rock Island rapids, examination and survey, for improvement by canal or otherwise-----	510 ² , 511
Rock Island rapids, improvement-----	119, 153, 163, 169, 171, 175, 176, 177, 183, 193, 204, 214, 229, 239, 261, 269, 290, 317, 346, 459
Rock Island rapids to Fort Snelling. <i>See</i> Fort Snelling, <i>supra</i> .	
Rock Island rapids to St. Anthony Falls. <i>See</i> St. Anthony Falls to Rock Island rapids, <i>infra</i> .	
Rock Island rapids, dam, etc., of Davenport Water Power Co. between Davenport and Le Claire, Iowa-----	1045, 1214
Rock River, Wis., reservoir. <i>See</i> Rock River.	
Rock River rapids. <i>See</i> Rock Island rapids, <i>supra</i> .	
Rockwood, Ill., below. <i>See</i> Wagners Landing, <i>infra</i> .	
Rollingstone, or Straight, Slough, Wis., and thence to Chippewa River, sheer booms of Mississippi River Logging Co-----	331
Rules and regulations respecting navigation, etc. <i>See</i> Regulations, etc.	
Rum River, Minn., reservoir. <i>See</i> Rum River.	
Rush Chute. <i>See</i> Burlington Harbor, etc., <i>supra</i> .	
Rush Island bend and Ivy Landing, Ill., examination and survey--	464
St. Anthony Falls, Minn., above, improvement-----	229, 239, 259, 317, 346, 377, 510, 576
St. Anthony Falls, Minn., above, survey-----	165
St. Anthony Falls, Minn., at, improvement-----	229, 239, 256, 296, 318, 348, 378, 413
St. Anthony Falls, Minn., at and above, improvement-----	183, 192, 204, 213
St. Anthony Falls, Minn., to Fort Snelling, examination and survey--	156

Mississippi River—Continued.

Page.

St. Anthony Falls, Minn., to Rock Island rapids, examinations and surveys	156, 165
St. Anthony Falls, Minn., to St. Paul. <i>See</i> St. Paul to St. Anthony Falls, <i>infra</i> .	
St. Cloud, Minn. <i>See</i> Sauk rapids, <i>infra</i> .	
St. Croix River, Wis. and Minn., reservoirs. <i>See</i> St. Croix River and Lake.	
St. Francis River, Ark., prevention of break into. <i>See</i> Walnut bend, <i>infra</i> .	
Ste. Genevieve, Mo., examination and survey	325
Ste. Genevieve, Mo., improvement	577
St. Louis Harbor, Mo., and approaches, examination and survey for prevention of floods	1129
St. Louis Harbor, Mo., damages to riparian owners at Venice, Ill., survey to determine	279
St. Louis Harbor, Mo., examinations and surveys	185, 279, 523
St. Louis Harbor, Mo., gauging. <i>See</i> Gauging, <i>supra</i> .	
St. Louis Harbor, Mo., improvement	78, 82, 100, 259, 269, 322, 336, 384, 460, 511, 577
St. Louis Harbor, Mo., Sawyers bend, payment to private parties for materials and labor	998, 1135
St. Louis, Mo., to Cairo, Ill., survey	1261, 1262
St. Louis, Mo., to Galena, Ill., improvement (<i>see also</i> Missouri, Ohio, and Arkansas rivers, etc., <i>supra</i>)	60
St. Louis, Mo., to Lake Michigan, via Illinois and Des Plaines rivers, survey	995, 1261, 1262
St. Louis, Mo., to mouth, and to Lake Michigan, via Illinois and Des Plaines rivers, survey, including report on waterpower and land drainage	1261, 1262
St. Louis, Mo., to St. Paul, Minn. <i>See</i> St. Paul to St. Louis, <i>infra</i> .	
St. Paul, Minn., gauging. <i>See</i> Gauging, <i>supra</i> .	
St. Paul, Minn., improvement	377
St. Paul, Minn., to Des Moines rapids, improvement	269, 289, 317, 346, 377, 412, 459
St. Paul, Minn., to Des Moines rapids, test, etc., of Adams's flume. <i>See</i> Adams's flume, <i>supra</i> .	
St. Paul, Minn., to Minneapolis, exchange of lands with city of Minneapolis at Lock and Dam No. 1	1158
St. Paul, Minn., to Minneapolis, improvement	213, 576, 637, 704, 781, 880, 929, 941, 996, 1026, 1037, 1113, 1203, 1293
St. Paul, Minn., to Minneapolis, improvement, Meekers Island lock and dam, grant of land in aid of	170, 213
St. Paul, Minn., to Minneapolis, payment to Loren Fletcher	929
St. Paul, Minn., to Minneapolis, use for public and private purposes of surplus water not needed for navigation flowing over Government dams	1187
St. Paul, Minn., to Missouri River, examination and survey	1113
St. Paul, Minn., to Missouri River, improvement	781, 782 783, 784, 813, 817, 831, 841, 931, 997, 1040, 1059, 1113, 1136, 1203
St. Paul, Minn., to Ohio River. <i>See</i> Ohio River to St. Paul, <i>supra</i> .	
St. Paul, Minn., to St. Anthony Falls, examinations and surveys	299, 467
St. Paul, Minn., to St. Louis, Mo., bridges. <i>See</i> Bridges, <i>supra</i> .	
Sandy Lake, Minn., reservoir, dam. <i>See</i> Reservoirs, <i>supra</i> .	
Sandy Lake, Minn., reservoir dam, to Brainerd. <i>See</i> Brainerd, <i>supra</i> .	
Sauk rapids, Minn., examination and survey near St. Cloud	327
Sauk rapids, Minn., dam, etc., of St. Cloud Water Power and Mill Co. at St. Cloud	424
Sauk rapids, Minn., dam, etc., of Sauk Rapids Manufacturing Co., between village of Sauk Rapids and St. Cloud	1069
Sauk rapids, Minn., dam, etc., of Sauk Rapids Water Power Co. at village of Sauk Rapids	1042, 1219
Sawyers bend, St. Louis Harbor, Mo. <i>See</i> St. Louis Harbor, <i>supra</i> .	
Seaboards, Atlantic and Gulf, water routes to. <i>See</i> Atlantic seaboard and Mexico, Gulf of, <i>supra</i> .	

Mississippi River—Continued.	Page.
Shreve's (Henry M.) snag-boat invention, payment of claims for----	332
Skunk River, Iowa, to Madison. <i>See</i> Madison to Skunk River, <i>supra</i> .	
Slough Landing, Tenn., to Hickman, Ky. <i>See</i> Reelfoot levee district, <i>supra</i> .	
Snag and dredge boats, etc., operation of. <i>See</i> Dredges, etc., <i>supra</i> .	
Snelling, Fort, Minn. <i>See</i> Fort Snelling, <i>supra</i> .	
Sny Island levee, examination and survey-----	419
Sny Island levee, improvement-----	460, 511, 577, 637, 783
Sny Island levee to Quincy, Ill. <i>See</i> Quincy, Ill., to Sny Island levee, <i>supra</i> .	
South Pass. <i>See also</i> Passes, <i>supra</i> .	
South Pass, annual reports to contain certain information regarding improvement by James B. Eads-----	249
South Pass, examinations and surveys by Engineer Department (permanent annual appropriation); itemized statements of expenditures to accompany annual reports-----	515, 962
South Pass, examinations and surveys by Engineer Department (specific appropriations)-----	246, 261, 277, 282, 283, 288, 319, 348, 377, 394, 413, 429, 461, 478, 513, 818, 962
South Pass, expiration or termination of contract with James B. Eads-----	920, 921
South Pass, improvement by Engineer Department (permanent annual appropriation)-----	921, 962.
South Pass, improvement by Engineer Department (specific appropriations)-----	920, 921, 926 ² , 962, 1114, 1203, 1241
South Pass, improvement by James B. Eads-----	245, 263, 281, 283, 301, 302 ² , 537, 920, 921, 926, 1071, 1072
South Pass, improvement by James B. Eads, liability in connection with closing of crevasse in Pass a Loutre-----	807
South Pass, improvement, dredges or tugs of Mississippi River Commission, use of-----	926, 962
South Pass, injury to or interference with works forbidden-----	249
South Pass, real estate and plant belonging to estate of James B. Eads, acquisition of-----	920, 962
South Pass, regulations for prevention of obstruction of channel and of injury to works-----	516, 580
South Pass, surveys by Coast and Geodetic Survey-----	249, 253
South Pass, term defined-----	516, 580
Southwest Pass. <i>See also</i> Passes, <i>supra</i> .	
Southwest Pass, examinations and surveys-----	819, 853
Southwest Pass, improvement-----	131, 221, 961, 1040, 1135, 1200, 1241
Stockholm, Wis., harbor of refuge, examination and survey-----	352
Stockholm, Wis., harbor of refuge, improvement-----	379, 401, 637
Straight, or Rollingstone, Slough, Wis. <i>See</i> Rollingstone Slough, <i>supra</i> .	
Sturgeon Bay, Ill., portions of, declared not navigable-----	1215
Superior Lake, canal to, examinations and surveys-----	703, 897
Texas, State of, inland route to the Rio Grande. <i>See</i> Donaldsonville, <i>supra</i> .	
Transportation route to the Gulf, and thence to and across Florida, survey-----	245
Transportation route to the Rio Grande, Tex. <i>See</i> Donaldsonville, <i>supra</i> .	
Transportation routes to the seaboard, surveys (<i>see also</i> Canals, etc.)-----	233, 243
Tributaries, principal, gauging. <i>See</i> Gauging, <i>supra</i> .	
Tributaries, western, including those northwest of Ohio River. <i>See</i> Western, etc., rivers.	
Upper river, dredges and snag boats. <i>See</i> Dredges, etc., <i>supra</i> .	
Upper river, gauging. <i>See</i> Gauging, <i>supra</i> .	
Valley of. <i>See also</i> Alluvial basin, <i>supra</i> .	
Valley of, appropriations for improvement of river to be used in acquiring boats for relief of flood sufferers-----	541
Venice, Ill., damages to riparian owners, survey to determine-----	279

Mississippi River—Continued.		Page.
Vessels. <i>See</i> Boats and Dredges, etc., <i>supra</i> , and Tolls.		
Vicksburg Harbor, Miss., examinations and surveys	460, 461, 568	
Vicksburg Harbor, Miss., gauging. <i>See</i> Gauging, <i>supra</i> .		
Vicksburg Harbor, Miss., including mouth of Yazoo River, improvement	274, 288	
309, 335, 382, 413, 460, 461 ² , 512, 577, 631, 638, 684, 697, 772, 812, 940		
Vidalia Harbor, La., improvement	320, 346, 638, 704, 785, 880, 999	
Vidalia Harbor, La., survey	306	
Wagners Landing, Ill., below Rockwood, survey	894, 895	
Walnut bend, Ark., levee for prevention of break into St. Francis River, examination and survey	673	
Walnut bend, Ark., levee for prevention of break into St. Francis River, improvement	698, 986	
Warsaw, Ill., examination and survey	587	
Warsaw, Ill., to Quincy, improvement	732, 783, 841, 997	
Warsaw, Ill., to Quincy, survey	704	
Watab, Minn., dam, etc., of Watab Rapids Power Company	1049	
Water courses connected with, under Mississippi River Commission, authority for allotment to, of funds from appropriations for improvement, etc., between Ohio River and Head of Passes	1114, 1261	
Water-level observations. <i>See</i> Gauging, <i>supra</i> .		
Water-reserve lands. <i>See</i> Reservoirs, <i>supra</i> .		
Waterways to the Atlantic seaboard and Gulf of Mexico. <i>See</i> Atlantic seaboard, Donaldsonville, Mexico, Gulf of, and Transportation routes, <i>supra</i> , and Canals.		
Waterways to the Great Lakes. <i>See</i> Michigan and Superior lakes, <i>supra</i> .		
Western tributaries, including those northwest of Ohio River. <i>See</i> Western, etc., rivers.		
Whipple Creek (branch of Quincy Bay), Ill., mouth, examination and survey	419	
Whipple Creek (branch of Quincy Bay), Ill., mouth, improvement	413, 460	
511, 638		
Wickliffe Harbor, Ky., examination and survey	1014	
Willow Slough, Ill., examination and survey	577	
Willow Slough, Ill., improvement	511	
Winnibigoshish Lake, Minn., reservoir. <i>See</i> Reservoirs, <i>supra</i> .		
Winona, Minn., improvement	412, 510	
Wisconsin River, Wis., reservoirs. <i>See</i> Wisconsin River.		
Wittenberg, Mo., improvement	841	
Wolf Lake, Minn., water-power dam near. <i>See</i> Bemidji, <i>supra</i> .		
Wrecks; snags, etc., removal of. <i>See</i> Dredges, etc., <i>supra</i> .		
Yazoo Pass, Miss., connection with, examinations and surveys	389, 421	
Mississippi River Commission:		
Appropriations for improvement of Mississippi River to be used by, in acquiring boats for relief of flood sufferers	541	
Creation of, vacancies, duties, etc.	304	
Headquarters, general offices, and meetings	935, 936	
Improvement by, of Mississippi River between Head of Passes and Ohio River, including levees between Head of Passes and Cape Girardeau, Mo., and surveys from Head of Passes to headwaters. <i>See</i> Ohio River to Head of Passes, under Mississippi River.		
Rectification by, of mouths of Atchafalaya and Red rivers, La. <i>See</i> Atchafalaya and Red rivers.		
Requirements regarding submission, etc., of annual reports. <i>See</i> Reports.		
Use of force, plant, and records of, upon survey by Board from mouth of the Mississippi to St. Louis, Mo., and thence to Lake Michigan, via Illinois and Des Plaines rivers	1262	
Mississippi River Logging Company	331	
Mississippi River Power Company:		
Dam above Monticello, Minn.	1174, 1283	
Dam at Clearwater, Minn.	1176, 1284	

	Page.
Mississippi Sound, Ala. and Miss.:	
<i>See also</i> Biloxi Bay and Harbor, Canals, etc., Gulfport Harbor, Horn Island Harbor and Pass, Mississippi City Harbor, Mobile Bay, Harbor, and River, Pascagoula Harbor and River, Pensacola Bay, and Ship Island Harbor and Pass.	
Channels connecting Mobile Bay with, examination and survey-----	1271
Dauphin Island-Cedar Point shoal, Ala. <i>See</i> Mobile Bay, Harbor, and River.	
Dredge boat for harbors and adjacent channels on coast of Mississippi-----	1240
Outside the range of islands, examination for entrance channel-----	645
Route from Ship Island to Bayou St. John, La., via, examination and survey-----	186
Transportation routes to the seaboard (<i>see also</i> Canals, etc.)-----	233
Mississippi, State of:	
Chattahooche River, opposite West Point Ga., across Alabama, to State line, toward Jackson, proceeds of sales of lands in Alabama to be applied to-----	92
Dredge boat for harbors and adjacent channels on coast of-----	1240
Proceeds of sales of lands to be applied to certain internal improvements-----	31, 92
Mississippi Water Power and Boom Company-----	427
Missoula River, Mont., examinations and surveys of Clark Fork River, including-----	591, 592
Missouri and Meramec Water Company-----	946
Missouri Chute, Mississippi River, Mo. <i>See</i> Mississippi River.	
Missouri River:	
<i>See also</i> Western, etc., rivers.	
Arkansas and Mississippi rivers and. <i>See</i> Mississippi and Arkansas rivers, etc., <i>infra</i> .	
Arkansas, Mississippi, and Ohio rivers and. <i>See</i> Mississippi, Ohio, and Arkansas rivers, etc., <i>infra</i> .	
Arrowrock, Mo., examination and survey-----	355
Arrowrock, Mo., improvement-----	458, 513, 514
Atchison, Kans., improvement-----	274, 289, 317, 347, 458, 513, 514, 705, 786
Bank protection, dikes, etc., of riparian owners for preservation of property-----	1000
Benton, Fort, Mont. <i>See</i> Fort Benton, <i>infra</i> .	
Big Sioux River, S. Dak., reservoirs in Lakes Kampeska and Poinsett, survey-----	918, 920
Big Sioux River, S. Dak., to north line of South Dakota, examination and survey-----	591
Big Sioux River, S. Dak., to Sioux City, Iowa. <i>See</i> Sioux City to Big Sioux River, <i>infra</i> .	
Bismarck, N. Dak., ice harbor, examination and survey-----	519
Bismarck, N. Dak., improvement-----	705, 787, 1264
Bismarck, N. Dak., to Sioux City, Iowa. <i>See</i> Sioux City to Bismarck, <i>infra</i> .	
Boonville, Mo., examination and survey-----	325
Bowling Green bend, Mo., to Harrison Island, improvement-----	786, 832
Brownville, Nebr., improvement-----	317, 347, 458
Brunswick, Mo. <i>See</i> Grand River, <i>infra</i> .	
Buck rapids, Mont., dam of Capital City Improvement Co.-----	1147
Canyon Ferry, Mont., to Three Forks. <i>See</i> Three Forks to Canyon Ferry, <i>infra</i> .	
Cedar City, Mo., examination and survey-----	278
Cedar City, Mo., improvement-----	295, 317, 347
Charette Creek, Mo., to Tuque Creek. <i>See</i> Tuque Creek to Charette Creek, <i>infra</i> .	
Council Bluffs, Iowa, improvement-----	269, 289, 317, 347, 513, 786, 842
Creve Cœur Lake, Mo., dam, etc., of Missouri and Meramec Water Co-----	946
Dams, etc., of riparian owners for protection of property-----	1000
Dikes, etc., of riparian owners for protection of property-----	1000
Discharge measurements. <i>See</i> Gauging, under Mississippi River,	

Missouri River—Continued.		Page.
Eastport, Iowa, improvement.....	275, 289,	317, 347
Elk Point, S. Dak., improvement.....		787, 931
Elk Point, S. Dak., to Sioux City, Iowa. <i>See</i> Sioux City to Elk Point, <i>infra</i> .		
Embankments, etc., of riparian owners for preservation of property.....		1000
Fort Benton, Mont., dams of Missouri River Improvement Co. within 30 miles above.....		1215
Fort Benton, Mont., improvement.....		881
Fort Benton, Mont., to mouth. <i>See</i> Mouth to Fort Benton, <i>infra</i> .		
Fort Benton, Mont., to Sioux City, Iowa. <i>See</i> Sioux City to Fort Benton, <i>infra</i> .		
Fort Leavenworth, Kans., gauging. <i>See</i> Gauging, under Mississippi River.		
Fort Leavenworth, Kans., improvement.....	275, 289, 317, 347,	458
Fort Pierre, S. Dak., improvement.....		705, 787
Gauging. <i>See</i> Gauging, under Mississippi River.		
Glasgow, Mo., improvement (<i>see also</i> West Glasgow, <i>infra</i>).....	295,	
	317, 347, 786,	832, 881
Grand River, Mo., at mouth of (at Brunswick), examination and survey.....		327
Great Falls, Mont., above, survey.....		412
Great Falls, Mont., at and near, improvement.....		787
Great Falls, Mont., to Sioux City, Iowa. <i>See</i> Sioux City to Great Falls, <i>infra</i> .		
Great Falls, Mont., to Stubbs Ferry, improvement.....	705,	787
Great Falls, Mont., to canyon next below Stubbs Ferry, examination and survey.....		591
Harrison Island, Mo., to Bowling Green bend. <i>See</i> Bowling Green bend to Harrison Island, <i>supra</i> .		
Headwaters to mouth. <i>See</i> Mouth to headwaters, <i>infra</i> .		
Hermann, Mo., examination.....		1000
Hermann, Mo., improvement.....		1115
Huntsdale, Mo., examination and survey.....		898
Huntsdale, Mo., improvement.....		832, 881
Ice harbors, improvements (<i>see also</i> Bismarck, <i>supra</i>).....		578
Improvement, removal of obstructions, etc. (limits not defined; <i>see also</i> Mississippi, etc., rivers, <i>infra</i>).....	119,	
	171, 175, 268, 289, 316, 339, 378, 412,	458, 787
Jefferson City, Mo., improvement.....		842
Judith, Mont., improvement.....		881
Kampeska Lake, S. Dak., reservoir. <i>See</i> Big Sioux River, <i>supra</i> .		
Kansas City, Mo., improvement.....	296, 317, 347, 458, 513,	881
Kansas City, Mo., to mouth. <i>See</i> Mouth, etc., <i>infra</i> .		
Kansas City, Mo., to Sioux City, Iowa, examination and survey.....		1276
Kansas City, Mo., to Sioux City, Iowa, improvement; expenditures for bank protection to be for navigation purposes only.....		1264
Kansas (Kaw) River, at or near, examination and survey.....		280
Kansas (Kaw) River, mouth of. <i>See</i> Kansas River.		
Kansas (Kaw) River to mouth. <i>See</i> Mouth, etc., <i>infra</i> .		
Kaw (Kansas) River. <i>See</i> Kansas River, <i>supra</i> .		
Leavenworth, Kans., improvement.....	513, 514, 786,	842
Leavenworth, Kans., to old mouth of Platte River, Little Point, examination and survey.....		591
Leavenworth, Fort, Kans. <i>See</i> Fort Leavenworth, <i>supra</i> .		
Lexington, Mo., examination and survey.....		1000
Lexington, Mo., improvement.....	323, 347,	842
Little Blue River, Mo., at, improvement.....	786, 832,	881
Little Point, old mouth of Platte River, to Leavenworth, Kans. <i>See</i> Leavenworth, etc., <i>supra</i> .		
Miami, Mo., examination and survey.....		523
Miami, Mo., improvement.....	513, 514,	786
Mississippi River and, improvement.....		75, 82, 86
Mississippi and Arkansas rivers and, improvement.....	171, 175,	
	183, 193, 204, 211, 214, 229, 239, 261, 264, 289, 316, 339,	378
Mississippi and Ohio rivers and, improvement.....	59, 60, 64, 67, 71,	82
Mississippi, Ohio, and Arkansas rivers and, improvement.....	96, 98, 100, 119,	152

Missouri River—Continued.

Page.

Missouri River Commission. <i>See</i> Mouth to Fort Benton, Mouth to headwaters, and Sioux City to mouth, <i>infra</i> , and Missouri River Commission.	
Missouri River Falls (Great Falls), Mont. <i>See</i> Great Falls, <i>supra</i> .	
Missouri River Power Co.'s dam near Stubbs Ferry, Mont.-----	674
Mouth to Fort Benton, Mont., improvement by Engineer Department; expenditures for bank protection to be for navigation purposes only-----	1264
Mouth to Fort Benton, Mont., improvement, surveys, etc., by Missouri River Commission, including salaries, etc.-----	513
Mouth to Fort Benton, Mont., surveys by Engineer Department. 289, 347, 378	
Mouth to headwaters, surveys, improvements, etc., assigned to Missouri River Commission; limits of assignment modified by acts of 1886, 1888, 1890.-----	411, 458, 513, 578
Mouth to Kansas City, expenditures for bank protection to be for navigation purposes only-----	1264
Mouth to Kansas City, examination and survey-----	1276
Mouth to Kansas City, improvement (<i>see also</i> Mouth to Kansas River, <i>infra</i>)-----	347, 1264
Mouth to Kansas River, improvement (<i>see also</i> Mouth to Kansas City, <i>supra</i>)-----	60
Mouth to St. Joseph, Mo. <i>See</i> St. Joseph to mouth, <i>infra</i> .	
Mouth to Sioux City, Iowa. <i>See</i> Sioux City to mouth, <i>infra</i> .	
Napoleon, Mo., examination and survey-----	898
Nebraska City, Nebr., improvement-----	261, 269, 275, 289, 317, 347, 458, 513, 786, 814
Nebraska side, opposite Sioux City, Iowa. <i>See</i> Sioux City to Big Sioux River, <i>infra</i> .	
Nigger bend, Mo., improvement-----	842
Niobrara, Nebr., examination and survey-----	328
Ohio and Mississippi rivers and. <i>See</i> Mississippi and Ohio rivers, etc., <i>supra</i> .	
Ohio, Mississippi, and Arkansas rivers and. <i>See</i> Mississippi, Ohio, and Arkansas rivers, etc., <i>supra</i> .	
Omaha, Nebr., improvement-----	269, 274, 289, 317, 347, 458, 513, 705, 786, 842
Ox Bow bend, Mont., dam, etc., of Ox Bow Power Co.-----	1061, 1295
Pelican bend, improvement-----	832, 836
Pierre, S. Dak., improvement-----	639, 705, 787
Pierre, Fort, S. Dak. <i>See</i> Fort Pierre, <i>supra</i> .	
Platte River, old mouth, Little Point, to Leavenworth, Kans. <i>See</i> Leavenworth, etc., <i>supra</i> .	
Plattsmouth, Nebr., improvement-----	317, 347, 458, 513
Poinsett Lake, S. Dak., reservoir. <i>See</i> Big Sioux River, <i>supra</i> .	
Randolph bend, Mo., improvement-----	842
Reservoirs for Big Sioux River at Lakes Kampeska and Poinsett, S. Dak. <i>See</i> Big Sioux River, <i>supra</i> .	
Rocheport, Mo., improvement-----	786
Rulo, Nebr., improvement-----	513, 931
St. Charles, Mo., examination and survey-----	278
St. Charles, Mo., improvement-----	321, 347, 786
St. Joseph, Mo., examinations and surveys-----	245, 1000, 1264
St. Joseph, Mo., improvement-----	261, 269, 289, 318, 347, 458, 513, 705, 832, 842, 1115
St. Joseph, Mo., improvement, contribution by public authorities of funds for-----	1115
St. Joseph, Mo., to mouth, improvement-----	540 (Vol. II)
Sioux City, Iowa, above, improvement (removal of obstructions, etc.)-----	412, 669, 726, 881, 1115
Sioux City, Iowa, above, survey-----	347
Sioux City, Iowa, improvement-----	275, 289, 318, 321, 347, 513, 705, 733, 786, 931
Sioux City, Iowa, Nebraska side, opposite. <i>See</i> Sioux City to Big Sioux River, <i>infra</i> .	
Sioux City, Iowa, reservoirs for Big Sioux River. <i>See</i> Big Sioux River, <i>supra</i> .	
Sioux City, Iowa, to Big Sioux River, S. Dak. (Nebraska side opposite South Sioux City, etc.), examinations and surveys-----	717, 741

Missouri River—Continued.

Page.

Sioux City, Iowa, to Big Sioux River, S. Dak. (Nebraska side, opposite South Sioux City, etc.), improvement.....	786, 882
Sioux City, Iowa, to Bismarck, N. Dak., improvement.....	881, 931
Sioux City, Iowa, to Elk Point, S. Dak., improvement.....	881
Sioux City, Iowa, to Fort Benton, Mont., examination and survey...	591
Sioux City, Iowa, to Fort Benton, Mont., expenditures for bank protection to be for navigation purposes only.....	1264
Sioux City, Iowa, to Fort Benton, Mont., improvement....	378, 412, 458, 1264
Sioux City, Iowa, to Great Falls, Mont., improvement.....	578, 639, 655
Sioux City, Iowa, to Kansas City, Mo. <i>See</i> Kansas City to Sioux City, <i>supra</i> .	
Sioux City, Iowa, to mouth, examinations and surveys...	268, 321, 1000, 1276
Sioux City, Iowa, to mouth, improvement by Engineer Department.....	378, 999, 1000, 1115
Sioux City, Iowa, to mouth, improvement, surveys, etc., by Missouri River Commission, including salaries, etc.....	410, 458, 578, 639, 669, 705, 726, 733, 785, 814, 832, 842, 880, 881, 931, 1000
Sioux City, Iowa (lower limits), to Stubbs Ferry, Mont., improvement.....	705, 786, 999
Sioux (Big) River, S. Dak., reservoirs. <i>See</i> Big Sioux River, <i>supra</i> .	
Sioux (Big) River, S. Dak., to north line of South Dakota. <i>See</i> Big Sioux River, etc., <i>supra</i> .	
Sioux (Big) River, S. Dak., to Sioux City, Iowa. <i>See</i> Sioux City to Big Sioux River, <i>supra</i> .	
South Dakota, north line of, to Big Sioux River. <i>See</i> Big Sioux River, etc., <i>supra</i> .	
South Sioux City, Iowa. <i>See</i> Sioux City, etc., <i>supra</i> .	
Structures (dikes, etc.) of riparian owners for protection of property.....	1000
Stubbs Ferry, Mont., above, dams, construction authorized.....	787
Stubbs Ferry, Mont., canyon next below, to Great Falls. <i>See</i> Great Falls, etc., <i>supra</i> .	
Stubbs Ferry, Mont., near, dam, etc., of Missouri River Power Co....	674
Stubbs Ferry, Mont., to Great Falls. <i>See</i> Great Falls to Stubbs Ferry, <i>supra</i> .	
Stubbs Ferry, Mont., to Sioux City, Iowa. <i>See</i> Sioux City to Stubbs Ferry, <i>supra</i> .	
Three Forks to Canyon Ferry, Mont., examination for water-power purposes.....	640
Tuque Creek, Mo., to Charette Creek, examination and survey.....	327
Upper, removal of obstructions. <i>See</i> Improvement and Sioux City, etc., <i>supra</i> .	
Vermilion, S. Dak., improvement.....	296, 318, 347
Water-level observations. <i>See</i> Gauging, under Mississippi River.	
West Glasgow, Mo., examination (<i>see also</i> Glasgow, <i>supra</i>).....	1000
Weston, Mo., examination and survey.....	591
Wilhoite bend, Mo., examination.....	1000
Winthrop, Mo., improvement.....	538, 539
Yankton, S. Dak., examination and survey.....	327
Yankton, S. Dak., improvement.....	639, 787
Yellowstone River, above, improvement.....	259, 269, 289, 318, 347
Missouri River Commission:	
Abolishment of.....	1000
Creation of, vacancies, duties, etc.....	410
Improvements, etc., of Missouri River by. <i>See</i> Mouth to Fort Benton, Mouth to headwaters, and Sioux City to mouth, under Missouri River.	
Requirements regarding submission, etc., of annual reports. <i>See</i> Reports.	
Missouri River (Great) Falls, Mont. <i>See</i> Great Falls, under Missouri River.	
Missouri River Improvement Company, dams of.....	1215
Missouri River Power Company, dam of.....	674
Missouri, State of, proceeds of sales of lands to be applied to certain internal improvements.....	92

Mitchells Falls, Merrimac River, Mass. <i>See</i> Merrimac River.	Page.
Mobile Bay, Harbor, and River, Ala.:	
Alabama Port, on Mon Louis Island, to deep-water basin between Forts Morgan and Gaines, construction of channel by Louis M. Tisdale.....	1095
Bon Secours Bay to Pensacola Bay, survey for route via.....	61
Channels connecting bay with Mississippi Sound, examination and survey.....	1271
Choctaw Point, wharves, etc., of Mobile, Jackson and Kansas City R. R.....	947
Contract with National Dredging Co.....	738, 804
Dauphin Island-Cedar Point shoal, examinations and surveys.....	384, 387
Dauphin Island-Cedar Point shoal, improvement of Pass au Heron.....	43, 58
Harbor, examinations and surveys.....	185, 270, 417, 684, 1095
Harbor, improvement.....	35, 48, 49, 67, 71, 80, 86, 121, 137, 185, 195, 205, 215, 230, 240, 243, 270, 291, 309, 335, 363, 398, 440, 489, 552, 617, 668, 669, 684 ² , 726, 732, 738, 753, 804, 815, 832, 852, 929, 961, 1038, 1095, 1238
Little Dauphin Island, wharves, etc., of Mobile Railway and Dock Co.....	1138
Outer bar, below Fort Morgan, examination and survey.....	913
Outer bar, below Fort Morgan, improvement.....	961, 1095, 1239
Pass au Heron. <i>See</i> Dauphin Island-Cedar Point shoal, <i>supra</i> .	
River, Chickasaw (Chickasabogue) Creek to Tombigbee River, im- provement.....	684
Tennessee River to, internal improvement, proceeds of sales of lands to be applied to.....	92
Mobile, Jackson and Kansas City Railroad Company.....	947
Mobile Railway and Dock Company.....	1138
Mobile River, Ala. <i>See</i> Mobile Bay, Harbor, and River.	
Moccasin bend, Tennessee River. <i>See</i> Tennessee River.	
Moccasin (Contentnia) Creek, or River. <i>See</i> Contentnia Creek, or River.	
Moccason (Contentnia) Creek, or River. <i>See</i> Contentnia Creek, or River.	
Mohawk River, N. Y., examination.....	795
Mokelumne River, Cal.:	
Examinations and surveys.....	352, 586
Examination and survey of San Joaquin River and tributaries, in- cluding, with a view to improvement in conjunction with State of California.....	1116
Improvement.....	410, 457, 514, 640, 706, 1116, 1265
Moline Harbor, Ill. <i>See</i> Mississippi and Rock rivers.	
Moller, Charles H. (schooner), removal of wreck of.....	210
Momence, Ill. <i>See</i> Kankakee River.	
Mona Lake (Lake Harbor), Mich. <i>See</i> Lake Harbor.	
Moneys:	
<i>See also</i> Appropriations, Contracts, Estimates, Expenditures, and Surplus fund.	
Receipts from various sources not paid into Treasury, annual statement regarding.....	1205
Monhegan Island Harbor, Me., examination and survey.....	523
Mon Louis Island, Mobile Bay, Ala. <i>See</i> Mobile Bay.	
Monona Lake, Wis., survey (under Rock River).....	88
Monongahela Navigation Company. <i>See</i> Monongahela River.	
Monongahela River, W. Va. and Pa.:	
<i>See also</i> Pittsburg Harbor.	
Deckers Creek, W. Va., at mouth, examinations and surveys.....	1132, 1280
Dunkard Creek, Pa., above (Locks and Dams 8 to 15, etc.), im- provement.....	204, 215, 230, 239, 271, 295, 321, 336, 381, 403, 446, 497, 627, 691, 735, 769, 811, 830, 1025, 1057
Dunkard Creek, Pa., below, acquisition by U. S. of property, etc., of Monongahela Navigation Company.....	453, 497, 560, 691, 735, 766
Dunkard Creek, Pa., below, Locks and Dams 1 to 7, when acquired, to be operated and cared for under permanent indefinite appro- priation, act of July 5, 1884.....	499, 561, 766, 767
Dunkard Creek, Pa., below (Locks and Dams 1, 3, 4, and 5), exam- ination and survey.....	1019

	Page.
Monongahela River, W. Va. and Pa.—Continued.	
Dunkard Creek, Pa., below (Locks and Dams 2, 3, 5, and 6, rebuilding, floating plant, etc.), improvement_ 864, 929, 976, 1040, 1087, 1203,	1229
Morgantown, W. Va., above, examination and survey_____	528
Morgantown, W. Va., to Fairmont, examination and survey_____	244
New Geneva, Pa., to Morgantown, W. Va., survey_____	196
Tolls not to be charged on commerce originating above Government works _____	446
Transportation route to the seaboard, survey_____	233, 243
Monquagon, Mich. <i>See</i> Detroit River.	
Monroe Harbor, La. <i>See</i> Ouachita River.	
Monroe Harbor, Raisin River, Mich.:	
<i>See also</i> La Plaisance Bay.	
Examinations and surveys_____	195, 522, 794, 800
Improvement_____ 70, 74, 79, 84, 101, 122, 153, 203, 212, 228, 237, 259,	
272, 293, 310, 337, 365, 442, 491, 554, 619, 686, 756, 857, 991, 1109, 1253	
Montana (Minton) Point, Mississippi River, Ill. <i>See</i> Mississippi River.	
Monterey Harbor, Cal., examinations and surveys_____	244, 1125
Monticello, Minn. <i>See</i> Mississippi River.	
Moodna Creek, or River, N. Y. <i>See</i> Cornwall, under Hudson River.	
Moorehead, James, relief of_____	115
Moore, James A., construction of Puget Sound-Lake Washington canal _____	1170, 1267
Moosabec bar, Jonesport, Me.:	
Examination and survey_____	299
Improvement_____ 350, 366, 401, 444, 494, 546, 611, 677, 744, 843	
Moratico Creek, Va., examination and survey_____	648
Morehead City, N. C.:	
<i>See also</i> Bogue Sound.	
Examination and survey of sound "between," in Carteret County_	388
Morgan Cut and Canal, Tex. <i>See</i> Galveston Bay and Harbor.	
Morgan, Fort, Ala. <i>See</i> Mobile Bay, Harbor, and River.	
Morgan Steamship Company, examination of channel created by, in Atchafalaya Bay _____	798
Mormon Channel, or Slough, Cal. <i>See</i> San Joaquin River.	
Morris Cove, New Haven, Conn. <i>See</i> New Haven Harbor.	
Morrisons Landing, McClellanville, S. C. <i>See</i> McClellanville.	
Morrison, William R., dam of_____	1167
Morristown Harbor, N. Y., examination and survey_____	1130
Moscow, Iowa, survey for canal to Bloomington (Muscatine)_____	90
Mosquito Creek, S. C.:	
Canal from Santee River, through. <i>See</i> Santee River.	
Waterway from Charleston to Beaufort, S. C., via, etc. <i>See</i> Charleston Harbor.	
Mosquito Inlet, Fla., examination and survey_____	418
Mosquito Lagoon, Fla.:	
Canal to Indian River. <i>See</i> Haulover Canal.	
Waterway from St. Johns River to Jupiter Inlet and Lake Worth, via. <i>See</i> St. Johns River.	
Mottville, Mich. <i>See</i> St. Joseph Harbor and River.	
Mound City, Ill.:	
Improvement of Ohio River at. <i>See</i> Ohio River.	
Prevention of break from Mississippi River at Beechridge. <i>See</i> Beechridge, under Mississippi River.	
Mount Carmel, Ill. <i>See</i> Wabash River.	
Mount Carmel Development Company_____	536, 537, 935
Mount Clemens, Mich. <i>See</i> Clinton River.	
Mount Desert, Me. <i>See</i> Bar Harbor.	
Mount Desert Island, Me. <i>See</i> Bar Harbor.	
Mount Holly Branch, Rancocas River, N. J. <i>See</i> Rancocas River.	
Mount Hope Bay, Mass.:	
<i>See also</i> Fall River Harbor.	
Examinations and surveys_____	716, 799
Mount Pleasant shore, Charleston Harbor, S. C. <i>See</i> Charleston Harbor.	
Mount Vernon, Va. <i>See</i> Potomac River.	

	Page.
Movement of vessels, etc., regulation of. <i>See</i> Vessels.	
Mud. <i>See</i> Deposits and Excavations.	
Mud Creek, Wis. <i>See</i> Fox River.	
Muddy River, Ky., examination and survey-----	299
Mud Island Pass, Tex., waterway from Galveston Bay to Brazos River, via. <i>See</i> Galveston Bay and Harbor.	
Mud Lake, Mermentau River, La. <i>See</i> Mermentau River.	
Mud Lake, St. Marys River, Mich. <i>See</i> St. Marys River.	
Mud River, Ga.:	
Waterway from Doboy to Sapelo, via. <i>See</i> Doboy Sound.	
Waterway from Savannah, Ga., to Fernandina, Fla., via. <i>See</i> Savannah Harbor and River.	
Mud River, S. C. <i>See</i> Beaufort-Savannah waterway.	
Mugu, Point, Cal. <i>See</i> Santa Barbara Channel and Harbor.	
Mulvihill, Thomas, reconveyance of land to-----	394
Municipal corporations. <i>See</i> Corporations.	
Municipal limits, cases of improvements by U. S. within, to be reported-----	1011
Munising Harbor, Mich., examination and survey-----	1275
Murderer (Moodna) Creek, or River, N. Y. <i>See</i> Cornwall, under Hud- son River.	
Murderkill River, Del.:	
Examinations and surveys-----	354, 586
Improvement-----	625, 691, 767, 865, 976, 1088, 1230
Murphy, William J., dam of-----	1144
Muscatine (Bloomington), Iowa. <i>See</i> Mississippi River.	
Muscle shoals, Tennessee River, Ala. <i>See</i> Tennessee River.	
Muscle Shoals Canal, Tennessee River, Ala. <i>See</i> Tennessee River.	
Muscle Shoals Power Company. <i>See</i> Tennessee River.	
Muskegon Harbor and River, Mich.:	
Harbor, examinations and surveys-----	156, 915
Harbor, improvement-----	162, 182, 191, 202, 228, 237, 255, 293, 310, 337, 365, 400, 442, 491, 554, 619, 686, 756, 857, 925, 967, 1107, 1252
River, Muskegon Lake to Newaygo, examination and survey-----	897
Muskegon Lake, Mich. <i>See</i> Muskegon Harbor and River.	
Muskegon River, Mich. <i>See</i> Muskegon Harbor and River.	
Muskingum River, Ohio:	
Examinations and surveys-----	186, 422, 525, 700, 701, 1018
Expenditure of appropriation for Lock and Dam No. 11 contingent upon certain expenditures by State upon Ohio Canal-----	1105
Harbor of refuge, examination and survey-----	280
Harbor of refuge, improvement-----	291, 309, 335, 363, 399, 440, 490, 553, 700
Improvement-----	507, 700, 731, 831, 990, 1105 ² , 1249
Leases for use of surplus water, and of land for mill sites, granting of, authorized; itemized statements of moneys received to accom- pany annual reports-----	507
Locks and dams, specific appropriation for operating and care-----	454
Payments to Edward T. Hayward, on account of Columbus F. and Charlotte G. Hayward, for damages to land at Dam No. 4, and conveyance of said land to U. S.-----	1218
Transfer to U. S. of State rights, franchises, and property pertain- ing to improvement of-----	454
Mystic River, Conn.:	
Examination and survey-----	519
Improvement-----	558, 623, 690, 763, 862
Mystic River, Mass.:	
Examinations and surveys-----	590, 838, 1128, 1275
Improvement-----	310, 333, 623, 689, 763, 862 ² , 973, 1082, 1222
N.	
Nags Heads, N. C., surveys for connecting Croatan and Roanoke sounds with the ocean at, via Roanoke Inlet-----	35, 97, 187
Nandua Creek, Va.:	
Examinations and surveys-----	595, 692
Improvement-----	768, 866, 977

Nansemond River, Va. :	Page.
Examinations and surveys	196, 469
Improvement	216, 231, 240, 258, 268, 497, 563, 626, 692, 768, 865, 1232
Nantasket Beach, Mass. <i>See</i> Boston Harbor.	
Nanticoke River, Del. and Md. :	
Application to Broad Creek River of appropriation for	446
Examinations and surveys (limits not defined)	298, 643, 721
Improvement	446, 768, 865, 1089, 1231
Improvement (with appropriation for Broad Creek River)	691
Northwest Fork (March Hope Creek), examinations and surveys ..	589, 1274
Seaford, Del., to Concord, examination and survey	519
Nantucket Harbor, Mass. :	
Examination for harbor of refuge (under Nantucket Sound, etc.) ..	953
Examinations and surveys	43, 234
Improvement	47, 56, 59, 103, 104 ² , 298,
307, 333, 360, 396, 436, 484, 546, 612, 678, 745, 844, 952, 1082, 1221	
Nantucket Island, Mass. :	
<i>See also</i> Nantucket Harbor.	
Examination of Nantucket Sound for harbor of refuge	953
Nantucket Sound, Mass., examination for harbors of refuge	953
Napa River, Cal. :	
<i>See also</i> Mare Island Strait.	
Examinations and surveys	418, 714, 793, 893, 1012
Improvement	514, 579, 706, 788, 1001, 1116, 1265
Napoleon, Ark. <i>See</i> Mississippi River.	
Napoleon, Mo. <i>See</i> Missouri River.	
Narragansett Bay, R. I. :	
<i>See also</i> Bissels Cove, Coaster Harbor Island, Pawtuxet Harbor and River, and Wickford Harbor.	
Conanicut Island, examinations	719, 796
Improvement	276, 285, 311, 339,
367, 402, 445, 494, 558, 623, 689, 763, 811, 828, 841, 927, 940, 1025, 1083	
Narrow River, mouth of. <i>See</i> Narrow River.	
Ohio reef, examination and survey	918
Providence River to ocean, via Western Passage, survey	740
Starve Goat Island to mainland, examination and survey	594
Narragansett Pier, R. I., examination and survey	185
Narraguagus River, Me. :	
Examinations and surveys	185, 327
Improvement	194, 207, 444, 494, 557, 622, 689, 762, 861
Narrow River, R. I., examination and survey at mouth	527
Narrows of Lake Champlain, N. Y. and Vt. <i>See</i> Four Channels and Narrows, under Champlain Lake, and Whitehall Harbor.	
Nasel River, Wash. :	
Examination and survey	595
Improvement	641
Improvement, diversion of funds from appropriation for Willapa River and Harbor	1004
Nassau Inlet, River, and Sound, Fla. :	
Inland passage from Fernandina to St. Johns River, examination and survey	235
Inland passage from St. Johns River to St. Marys Harbor and River. <i>See</i> St. Johns River.	
Inland passage to St. Johns River, improvement	230
Nassowaddox River, Va., examination and survey	528
Natalbany River, La. :	
<i>See also</i> Tickfaw River.	
Examinations and surveys	387, 419
Natchez, Miss. <i>See</i> Mississippi River.	
National Dredging Company, contract for work at Mobile Harbor, Ala. .	738, 804
Naugatuck Harbor, Conn. <i>See</i> Bridgeport Harbor.	
Naushon Island, Mass. <i>See</i> Tarpaulin Cove.	
Naval officers, retired, employment of, by Chief of Engineers	792
Navarro River, Cal., examination and survey	643
Navesink (North Branch of Shrewsbury) River, N. J. <i>See</i> Shrewsbury River.	

Navigable waters:

Page.

See also Alaska, Land, Nonnavigable waters, Rivers and harbors, and Tolls.

Alteration of channels, etc., laws governing. *See* Deposits and Excavations, etc.

Anchorage grounds, establishment of. *See* Anchorage grounds, etc.

Attorney-General, enforcement by, of laws for protection, etc., of. *See* Attorney-General and District attorneys.

Bridges, construction, alteration, etc., of, laws governing. *See* Bridges.

Bridges, regulations for opening of draws. *See* Bridges.

Dams, construction of, by private parties. *See* Dams.

Department of Justice, enforcement by, of laws for protection, etc., of. *See* Attorney-General and District attorneys.

Deposits, laws governing. *See* Deposits and Excavations.

Depths referred to mean low water----- 884, 1005, 1121, 1270

District attorneys, prosecution by, of offenders against laws for protection, etc., of. *See* District attorneys.

Dumpings, laws governing. *See* Deposits and Excavations.

Enforcement of laws for protection, etc., of. *See* Attorney-General and District attorneys.

Engineer officers and employees, duties of, in enforcement of laws for protection, etc., of. *See* Employees and Engineer officers.

Excavations, laws governing. *See* Deposits and Excavations.

Fillings, laws governing. *See* Deposits and Excavations.

Floating of logs, rafts, timber, etc., laws governing. *See* Logs, etc.

Harbor lines, laws governing establishment of, etc. *See* Harbor lines.

Improvement by individuals and corporations, authority, etc., for--- 1005

Improvement by individuals and corporations, cases to be reported to Congress----- 1011

Improvement by State, etc., of channels along New Jersey coast or waters adjacent thereto, authority for----- 1206

Improvement by U. S. of inner harbors, or waters within shore lines or corporate limits, or channels adjacent to wharves, cases to be reported----- 1011

Laws for improvement of rivers and harbors, compilation of----- 1010, 1063, 1281

Laws for protection and preservation of, in force in 1896, compilation of----- 790

Laws for protection and preservation of, in force in 1907. *See* the various subheadings under Navigable waters.

Legal proceedings in cases of violations of laws for protection, etc., of. *See* Attorney-General and District attorneys.

Lights, beacons, fog signals, buoys, etc., establishment of, by persons not under control of Light-House Board----- 1182

Lights in the Philippines, in aid of navigation. *See* Light-houses.

Lights on power, etc., dams constructed by private parties, maintenance of----- 1184

Materials and plant, use or injury by private parties. *See* Materials.

New York Harbor, N. Y., and adjacent waters, fishing or dredging for shellfish, or interference with navigation of ocean steamships. *See* New York Bay and Harbor.

New York Harbor, N. Y., and adjacent waters, prevention of deposits. *See* New York Bay and Harbor.

Obstructions, creation or continuance of, unauthorized, prohibition, etc., regarding----- 583, 584, 886, 887, 890, 893, 1010

Penalties for violations of laws for protection, etc., of. *See* Violations, etc., *infra*, and Penalties.

Philippine Islands, control of property and rights acquired from Spain. *See* Philippine Islands.

Plant and materials, use or injury by private parties. *See* Materials.

Porto Rico, construction of wharves, piers, etc., on lands of U. S. under water, and filling in and dredging of such lands----- 1171, 1271

Porto Rico, jurisdiction of Federal Government----- 1030

Property, public, use, injury, etc., by private parties. *See* Materials and Structures.

Navigable waters—Continued.

Page.

Prosecution of offenders against laws for protection, etc., of. *See* Attorney-General and District attorneys.

Refuse matter, depositing of, laws governing. *See* Deposits.

Regulations for protection, etc., of. *See* Regulations.

Revenue officers, duties of, in enforcement of laws for protection, etc., of. *See* Revenue officers.

Rules for protection, etc., of. *See* Regulations.

Running of logs, rafts, timber, etc., laws governing. *See* Logs, etc.

Structures, private, laws governing construction, etc., of. *See* Bridges and Structures.

Structures, public, use, occupancy, or injury by private parties. *See* Structures.

Sunken vessels. *See* Vessels, *infra*.

Tidewater, displacement of, compensation for— 713, 887², 890, 893, 906², 1010

Transportation of refuse matter, etc., laws governing. *See* Deposits.

Vessels, anchoring or sinking of, in navigable channels. *See* Vessels.

Vessels, speed, movement, etc., of, regulations governing, to prevent injury to canals and improved channels— 711, 890, 1008, 1009, 1010

Vessels, wrecked, general laws regarding removal, etc., of. *See* Wrecks.

Violations of laws for protection, etc., of, investigation of, funds.

applicable for payment of expenses incurred subsequent to March 3, 1905 -----

1123

Violations of laws for protection, etc., of, investigation of, funds applicable for payment of expenses incurred prior to March 3, 1905, when not derived from appropriations for improvement, etc., at the localities affected. *See* Examinations and surveys.

Violations of laws for protection, etc., of, penalties for. *See* Penalties.

Violations of laws for protection, etc., of, to be reported by certain officials, and district attorneys to institute legal proceedings under direction of Attorney-General— 517², 581, 584, 890², 891, 1122, 1123

Waste matter, depositing of, laws governing. *See* Deposits.

Wrecked material and craft. *See* Wrecks.

Navigation:

See also Bridges, Navigable waters, Rivers and harbors, and Structures.

Benefits to commerce and, from completion of works to be stated in annual reports ----- 155, 164

Permanent International Commission of Congresses of ----- 1027

Laws for improvement of rivers and harbors----- 1010, 1063, 1281

Laws for protection, etc., of. *See* Navigable waters.

Neabsco Bay and Creek, Va.:

Examinations and surveys----- 196, 325

Improvement----- 349

Neah Bay, Wash., harbor of refuge, examinations. 796, 901

Neapsico (Neabsco) Bay and Creek, Va. *See* Neabsco Bay and Creek.Nebraska City, Nebr. *See* Missouri River.

Neches River, Tex.:

Examination and survey (limits not defined)----- 1279

Mouth and above, improvement----- 257, 273, 288, 315, 344, 373, 398

Mouth, and up to Boonville, examination and survey----- 209

Mouth, including channel through Sabine Lake, furnishing of funds by citizens of Beaumont and Orange for improvement----- 983

Mouth, including channel through Sabine Lake and connection with Port Arthur Canal through Taylors Bayou, examinations and surveys ----- 353, 648, 719, 802, 873, 1020

Mouth, including channel through Sabine Lake, connection with Port Arthur Canal through Taylors Bayou, and widening of canal, improvement----- 873, 983², 1045, 1100, 1204, 1243

Mouth to Bevelport, examination and survey----- 299

Mouth to Shooks Bluff, examination and survey----- 648

Port Arthur Canal, inquiry regarding construction of, by Port Arthur Channel and Dock Company----- 825, 826

Water hyacinths, removal of. *See* Water hyacinths.

Neebish channels, St. Marys River, Mich.	<i>See</i> St. Marys River.	Page.
Neely, John B. (of R. G. Huston & Co.), payment to	-----	479
Neenah, Wis.	<i>See</i> Fox River.	
Neenah (Fox) River, Wis.	<i>See</i> Fox River.	
Negro Cut, Indian River Inlet, Fla.	<i>See</i> Indian River, etc.	
Nehalem Bay and River, Oreg.:		
Examinations and surveys	-----	244, 422, 468, 526, 801
Improvement	-----	556
Nelson, Charles L., relief of	-----	144
Nemadji River, Wis.	<i>See</i> Duluth-Superior Harbor.	
Neosho River, Kans., examination and survey	-----	793
Neponset River, Mass.:		
Examinations and surveys	-----	645, 799, 1128
Improvement, contingent upon certain work by State of Massachusetts	-----	1221
Nereus (dredge), documenting of, as a vessel of the U. S.	-----	1163
Nestucca (Nestugga) River, Oreg.	<i>See</i> Nestugga River.	
Nestugga River, Oreg.		
Examinations and surveys	-----	617, 723
Improvement	-----	789
Neuse River, N. C.:		
<i>See also</i> Norfolk Harbor waterways.		
Examinations and surveys	-----	196, 244, 280, 801, 1018
Improvement	-----	275, 287,
313, 342, 370, 404, 448, 499, 564, 627, 694, 769, 867, 978, 1091, 1233		
Waterway from Newbern to Beaufort, N. C.	<i>See</i> Newbern.	
Waterway to Cape Fear River, examination and survey	-----	245
Neversink River, N. Y., examination and survey	-----	1277
Neville Island, Ohio River, Pa.	<i>See</i> Ohio River.	
Neville Township, Pa., closure of channel in Ohio River on south side of		
Neville Island	-----	253, 1009
New Albany Harbor, Ind.	<i>See</i> Ohio River.	
Newark Bay, N. Y. and N. J.:		
<i>See also</i> Passaic River and Staten Island-New Jersey channel.		
Anchorage grounds, establishment, etc., of	-----	480, 1151
Canal across Bergen Neck, examination and survey	-----	300
Examination and survey	-----	124
Improvement	-----	120, 402
Shooters Island.	<i>See</i> Staten Island-New Jersey channel.	
New Baltimore, N. Y.	<i>See</i> Hudson River.	
New Bedford Harbor, Mass.:		
Anchorage area, examinations and surveys	-----	678, 1128
Channel above Fairhaven bridge, examination and survey	-----	896
Channel leading to Fairhaven bridge, examination and survey	-----	799
Examinations and surveys (limits not defined)	-----	122, 233, 466, 645, 1128
Fairhaven Harbor, examination and survey	-----	1128
Improvement, including Fairhaven Harbor	-----	76,
87, 243, 256, 484, 546, 612, 678, 746, 845, 952, 1082, 1221		
Shoal below Fairhaven bridge, between Fish Island and Commercial wharf, examination and survey	-----	896
Newbern, N. C.:		
<i>See also</i> Neuse and Trent rivers.		
Clubfoot, Harlowe, and Newport rivers (waterway to Beaufort), examination and survey	-----	388
Waterway to Beaufort, N. C., improvement	-----	370 ² , 439, 488, 1233
Newberry, Spencer B., et al., dam of	-----	1140
New Brunswick Harbor, N. J.:		
<i>See also</i> Raritan River.		
Improvement	-----	77, 82
New Buffalo Harbor, Mich.:		
Examinations and surveys	-----	156, 354
Improvement	-----	121, 162, 182, 202, 379
Newburyport Harbor, Mass.:		
<i>See also</i> Merrimac River.		
Improvement	-----	311, 333, 360, 396, 436, 484, 546, 612, 678, 745, 844, 950, 1081
New Canal (New Orleans to Lake Pontchartrain), La.	<i>See</i> Pontchartrain Lake.	
Newcastle, Del.	<i>See</i> Delaware Bay and River.	

	Page.
Newcastle, N. H. <i>See</i> Portsmouth Harbor.	
New Duluth, Minn. <i>See</i> Duluth-Superior Harbor and St. Louis River.	
New Harbor, Me.:	
Examination and survey-----	1015
Improvement-----	1081
New Haven Harbor, Conn.:	
Examinations and surveys-----	746, 797, 1272
Improvement (breakwaters)-----	295,
311, 333, 361, 396, 436, 485, 547, 613, 679, 746, 953, 1223	
Improvement (excavation, etc.)-----	120,
184, 194, 207, 208, 217, 242, 275, 285, 307, 333, 361, 396, 436,	
485, 548, 614, 679, 746, 846, 929, 941, 1026, 1037, 1084, 1223	
Improvement of Mill and Quinnipiac rivers, and of basin east of	
Canal wharf, added to project-----	953
Morris Cove, examination and survey-----	1272
West River (West Haven Harbor), examinations and surveys-----	244,
714, 1012	
West River (West Haven Harbor), improvement-----	1084, 1223
New (Little Egg) Inlet, N. J. <i>See</i> Little Egg Inlet.	
New Jersey and Staten Island Junction Railroad Company-----	605
New Jersey-Staten Island channel, N. J. and N. Y. <i>See</i> Staten Island-	
New Jersey channel.	
New Jersey, State of, improvement by, etc., of channels along New	
Jersey coast or waters adjacent thereto, authority for-----	1206
New Liberty, Ill. <i>See</i> Ohio River.	
New London Harbor, Conn.:	
Examinations and surveys-----	519, 862, 1125
Improvement-----	311, 339, 361, 396, 436, 623, 953, 1038, 1058, 1084
Shaws Cove, examination and survey-----	586, 1272
Winthrop Cove, examination and survey-----	953
New Madrid, Mo. <i>See</i> Mississippi River.	
New Orleans, La.:	
<i>See also</i> Pontchartrain Lake and St. John Bayou.	
Grant to St. Tammany Water Works Co. of right of way to lay con-	
duits, etc., under Lake Pontchartrain, and thence to-----	359
Harbor, etc., in Mississippi River. <i>See</i> Mississippi River.	
New Orleans and Northeastern Railroad. <i>See</i> Pontchartrain Lake.	
Newport Creek, Md., examination and survey-----	589
Newport Harbor, Cal., examination and survey-----	444, 1272
Newport Harbor, R. I.:	
<i>See also</i> Coaster Harbor Island.	
Examinations and surveys-----	208, 594, 1020, 1131
Grant to city of right to construct sewer through or across break-	
water at Goat Island-----	426
Improvement-----	217,
232, 241, 349, 360, 396, 436, 485, 547,	
613, 679, 746, 846, 925, 952, 1222	
Newport News, Va. <i>See</i> Hampton Roads.	
Newport River, N. C.:	
<i>See also</i> Beaufort Harbor.	
Examination and survey-----	388
New River, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examinations and surveys-----	355, 1018, 1277
Improvement-----	78, 81, 86, 370, 404, 448, 499, 564, 627, 1091, 1233
Waterway to Beaufort, N. C., improvement-----	448,
488, 551, 627, 693, 769, 979, 1233	
Waterway to Swansboro, examination and survey-----	525
Waterway to Swansboro, improvement-----	564, 1233
New River, Va. and W. Va.:	
At confluence with Greenbrier River, examination and survey-----	1022
Dam of F. H. Fries and W. C. Ruffin-----	909
Improvement-----	259, 267, 288, 313, 335, 369, 447, 499
Improvement discontinued-----	1008
Wythe County, Va., lead mines to Greenbrier River, W. Va., exam-	
ination and survey-----	210
Wythe County, Va., lead mines to mouth of Wilson, Grayson County,	
examinations and surveys-----	234, 279

	Page.
New Rochelle Harbor, N. Y.:	
<i>See also</i> Echo Bay Harbor.	
Channel to City Island, examination and survey-----	362
Examinations and surveys-----	324, 362, 718, 899
Improvement-----	334, 361, 480, 487
New Shoreham, R. I. <i>See</i> Block Island.	
Newton, Ala. <i>See</i> Choctawhatchee River.	
Newton Creek, N. J., examinations and surveys-----	352, 384
Newtown Bay and Creek, N. Y.:	
Channel to Flushing Bay, examination-----	795
Examinations and surveys-----	298, 387, 718, 737
Improvement-----	320,
367, 402, 445, 495, 558, 624, 690, 749, 809, 1086, 1227, 1291	
New Utrecht, N. Y., tunnel to Middletown-----	605
New Whatcom (Bellingham) Harbor, Wash. <i>See</i> Bellingham Bay and Harbor.	
New York Bay and Harbor, N. Y.:	
<i>See also</i> Hudson River.	
Ambrose channel, name of East channel changed to (<i>see also</i> Narrows to the sea, <i>infra</i>)-----	924, 928
Anchorage grounds, establishment, etc., of-----	480, 1151
Battery-Governors Island channel, survey-----	800
Battery, reef in North (Hudson) River near Pier 1 (A), removal of-----	925, 1031, 1085
Battery to Atlantic Ocean (Gedney, Main Ship, Swash, and Fort Hamilton, etc., channels), improvement (<i>see also</i> Narrows to the sea, <i>infra</i>)-----	159, 166, 171 ² , 210,
238, 402, 438, 486, 549, 614, 681, 749, 847, 925, 954, 1085, 1225	
Bergen Neck, N. J., canal across, examination and survey-----	300
Bridge across North or Hudson River, authority of Secretary of War to change plans or location of any, heretofore approved under Congressional authority-----	1282
Buttermilk channel. <i>See</i> Buttermilk channel.	
East (Ambrose) channel. <i>See</i> Ambrose channel, <i>supra</i> , and Narrows to the sea, <i>infra</i> .	
East River. <i>See</i> East River.	
Ellis Island and docks of New Jersey Central R. R. to Robbins reef light and Constable Hook, examination and survey-----	354
Fishing or dredging for shellfish, or interference with navigation by ocean steamships, etc., in channels to or from, prohibition, etc., regarding-----	708
Fort Hamilton to Gowanus Creek, Brooklyn, width of piers, and filling of same with solid materials, between pierhead and bulkhead lines-----	748
Governors Island, enlargement, dredging, and wharf construction-----	939,
1029, 1041, 1060, 1136, 1294	
Gowanus Bay channels. <i>See</i> Gowanus Bay, Canal, and Creek.	
Harlem River. <i>See</i> Harlem River.	
Hoboken, N. J., North (Hudson) River, in front of, examination and survey-----	386
Jersey City, N. J., North (Hudson) River, in front of, examination and survey-----	386
Jersey City, N. J., North (Hudson) River in front of, improvement (<i>see also</i> Battery to Atlantic Ocean, <i>supra</i>)-----	238
Jersey City, N. J., to Ellis Island, basin or ship channel (between deep water of North (Hudson) River and Ellis Island), examination and survey-----	525
Jersey City, N. J., to Ellis Island, ship channel in North (Hudson) River, from, examination and survey-----	524
Narrows to the sea (including Ambrose (East) channel), examinations and surveys (<i>see also</i> Battery to Atlantic Ocean, <i>supra</i>)-----	801, 838
Narrows to the sea (Ambrose (East) channel), improvement (<i>see also</i> Battery to Atlantic Ocean, <i>supra</i>)-----	847 ² ,
941, 1026, 1037, 1058, 1134, 1199, 1225, 1292	
Narrows to the sea (Ambrose (East) channel), improvement, diversion of funds for reef in North (Hudson) River near Pier 1 (A)-----	1031, 1085

New York Bay and Harbor, N. Y.—Continued.	Page.
Narrows to the sea (Ambrose (East) channel), regulations limiting use to daylight navigation by vessels of certain draft-----	1225
Prevention of obstructive and injurious deposits in, and in adjacent or tributary waters, appropriations for expenses, etc-----	483, 539, 545, 609, 656, 667, 673, 726, 735, 736, 805, 816, 832, 833, 835, 842, 843, 931, 932, 942, 1026, 1027, 1036, 1041, 1060, 1061, 1137, 1205, 1294
Prevention of obstructive and injurious deposits in, and in adjacent or tributary waters, damages to canal boat <i>W. H. Smith</i> -----	834
Prevention of obstructive and injurious deposits in, and in adjacent or tributary waters, legal provisions regarding-----	462, 481, 708, 1010
Robbins reef light-house, channel west of, from Kill van Kull to vicinity of Liberty Island, examination and survey-----	1130
Robbins reef light-house, channel west of, to connect with mouth of Arthur Kill, examination-----	647
Sandy Hook to Coney Island Point, examination and survey-----	352
Spuyten Duyvil Creek. <i>See</i> Harlem River.	
Staten Island ice breaker, improvement-----	77
Supervsion of. <i>See</i> Fishing, etc., and Prevention of obstructive, etc., deposits, <i>supra</i> .	
Tunnel from Middletown to New Utrecht-----	605
Weehawken to Bergen Point, N. J., North (Hudson) River, examination and survey-----	421
Wreck of schooner <i>Charles H. Moller</i> eastward of Flynn's Knoll, between Swash and Main Ship channels, off Sandy Hook, removal of-----	210
Wreck of steamship <i>Scotland</i> in South channel, near Sandy Hook, removal, etc., of-----	159, 166, 168, 171
New York city, N. Y.:	
<i>See also</i> New York Bay and Harbor.	
Improvement of Jamaica Bay by, and cooperation of Secretary of War in connection therewith-----	1276
New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
New York, State of:	
Erie Canal Basin, Buffalo. <i>See</i> Buffalo Harbor.	
Expenditure of improvement funds for Black Rock Harbor, Buffalo, conditioned upon construction of barge canal by-----	1085
Service of Maj. Thomas W. Symons in connection with canals of--	1047
Nezquipue Bayou (tributary of Mermentau River), La. <i>See</i> Mermentau River.	
Niagara Falls, Niagara River, N. Y. <i>See</i> Niagara River.	
Niagara River, N. Y.:	
<i>See also</i> Northern and Northwestern Lakes.	
Black Rock Harbor. <i>See</i> Buffalo Harbor.	
Black Rock to Tonawanda, examination and survey-----	468
Buffalo Harbor. <i>See</i> Buffalo Harbor.	
Canal to connect Lakes Erie and Ontario, around Niagara Falls, etc., surveys-----	167, 523
Diversion of water from, and tributaries for power, etc., purposes, and preservation of Niagara Falls, etc., control and regulation in re-----	1192, 1209
Diversion of water from, report and duties of International Waterways Commission in re preservation of Niagara Falls-----	1144
Erie Canal Basin. <i>See</i> Buffalo Harbor.	
Improvement-----	350, 367, 486, 549, 614, 624, 681 ² , 749, 764, 848, 863, 955, 1226
North Tonawanda Harbor. <i>See</i> Tonawanda Harbor.	
Port Day, examinations and surveys-----	326, 593
Tonawanda Harbor. <i>See</i> Tonawanda Harbor.	
Tonawanda to Gill Creek, examination and survey-----	1277
Uses, levels, etc., of waters of Great Lakes, including. <i>See</i> International Waterways Commission, under Northern and Northwestern Lakes.	
Waterworks tunnels at Black Rock Harbor. <i>See</i> Buffalo Harbor.	
Youngstown to Lake Ontario, examination and survey-----	422
Niantic Harbor and River, Conn., examinations and surveys-----	209, 418, 797
Nicaraguan Canal route, surveys, etc-----	884, 885 ⁴

Nigger bend, Missouri River, Mo. <i>See</i> Missouri River. .	Page.
Niobrara, Nebr. <i>See</i> Missouri River.	
Niobrara, Fort, Military Reservation, Nebr. <i>See</i> Niobrara River.	
Niobrara River, Nebr., dam at Fort Niobrara Military Reservation-----	1180
Nishnabotana River, Iowa, examinations and surveys-----	355, 421
Nissequogue River, N. Y. <i>See</i> Smithtown Harbor.	
Nobska Point, Falmouth Harbor, Mass. <i>See</i> Falmouth Harbor.	
Noc (Noquette), Little Bay de, Mich. <i>See</i> Little Bay de Noc.	
Nolin River, Ky., improvement (under Green River)-----	1103, 1104
Nome Improvement Company, improvement of Snake River at Nome, Alaska-----	1119, 1120, 1268
Nomini Creek, or River, Va.:	
Examinations and surveys-----	209, 328
Improvement-----	216, 231, 240,
	286, 313, 341, 369, 496, 562, 626, 693, 768, 866, 1089, 1231
Nonnavigable waters:	
Calumet River, Chicago, Ill., abandonment of portion of old channel near Chittenden Road Bridge-----	1048
Cane River (arm of Red River), Natchitoches Parish, La.; repeal-----	1123, 1191
Cuivre River, Mo., in Lincoln and St. Charles counties-----	906
Grand River, Mo., above Brunswick-----	1067
Iowa River, Iowa, north of Wapello-----	179
Iowa River, Iowa, Toolsboro to Wapello-----	703
Mississippi River, Sturgeon Bay, Ill.-----	1215
Mississippi River, West channel at Grand Island, opposite La Crosse, Wis-----	936
Ohio River, channel on south side of Neville Island, Pa.; repeal--	253, 1009
Osage River, Mo., above Benton-St. Clair county line-----	1023
Osage River, Mo., above immediate vicinity of Warsaw-----	1043
Sturgeon Bay, Mississippi River, Ill.-----	1215
Torch Lake (Houghton County), Lake Superior, Mich., exempted from provisions of act of 1890 for protection, etc., of navigable waters-----	584
Nontidal waters. <i>See</i> Navigable waters.	
Nooksak River, Wash.:	
<i>See also</i> Puget Sound and tributaries.	
Examinations and surveys-----	328, 595, 648, 724
Improvement-----	379, 410, 458, 515, 580, 1004
Noquette (Noc), Little Bay de, Mich. <i>See</i> Little Bay de Noc	
Norfolk Harbor, Va.:	
<i>See also</i> Elizabeth River and Hampton Roads.	
Eastern Branch, Elizabeth River, bar at mouth, examination and survey-----	235
Hospital Point, examination and survey-----	527
Hospital Point, improvement-----	957, 1038
Improvement, including approaches-----	259, 268, 287, 308, 334,
	363, 398 ² , 439, 488 ² , 551, 615, 682, 751, 834, 957, 1089, 1231 ²
Main stream and Eastern, Southern, and Western branches, Elizabeth River, examination and survey-----	1132
Main stream, from Hampton Roads to and including Southern Branch, Elizabeth River, to the navy-yard, examinations and surveys-----	195, 739, 1132
Pinner Point, examination and survey-----	919
Pinner Point, improvement-----	1089
Southern Branch, Elizabeth River, above the navy-yard, examination and survey-----	196
Waterway from Chesapeake Bay to Charleston, S. C., survey from Dismal Swamp Canal to Winyah Bay-----	82
Waterway to Albemarle Sound, N. C., via Currituck Sound, improvement-----	564, 628, 694, 769, 867, 978, 1090, 1233
Waterway to Beaufort Inlet, N. C., examinations and surveys (<i>see also</i> Pamlico Sound waterways)-----	917, 1018, 1130
Waterway to Cape Fear River, N. C., examinations and surveys---	245, 281
Waterway to Lynnhaven Bay, via Eastern Branch, Elizabeth River. <i>See</i> Lynnhaven Bay.	

Norfolk Harbor, Va.—Continued.

Page.

Waterway to sounds of North Carolina (Southern and Deep Creek branches of Elizabeth River, Dismal Swamp Canal, Turners Cut, Pasquotank River, and Albemarle and Croatan sounds to Pamlico Sound), examinations and surveys.....	694, 719, 836
Waterway to sounds of North Carolina (Southern and Deep Creek branches of Elizabeth River, Dismal Swamp Canal, Turners Cut, Pasquotank River, and Albemarle and Croatan sounds to Pamlico Sound), improvement.....	866, 929, 941, 1090, 1233
Waterway to the ocean south of Cape Hatteras, embracing the Dismal Swamp and the Albemarle and Chesapeake Canal lines, survey	281
Norris Cut, Biscayne Bay, Fla. <i>See</i> Biscayne Bay.	
North Bar Lake, Leelanaw County, Mich. <i>See</i> Empire Bay and Harbor.	
North Bay (north end of Cases Inlet), Wash., channel to Hood Canal, examination.....	720
North Branch, Chicago River, Ill. <i>See</i> Chicago Harbor and River.	
North Branch, Potomac River, W. Va. and Md. <i>See</i> Chesapeake and Ohio Canal.	
North Branch, Shrewsbury River, N. J. <i>See</i> Shrewsbury River.	
North Branch, Susquehanna River, Pa. <i>See</i> Susquehanna River.	
North Carolina Cut, N. C. <i>See</i> Norfolk Harbor waterways.	
North Carolina, sounds of. <i>See</i> Norfolk Harbor and Pamlico Sound waterways.	
Northeast Branch, Cape Fear River, N. C. <i>See</i> Northeast River.	
Northeast River, Md.: Examinations and surveys.....	298, 521
Improvement.....	206, 320, 562, 626
Northeast River, N. C.: Examinations and surveys.....	422, 525, 723, 1131
Improvement.....	448, 564, 627, 693, 866, 978, 1091, 1233
North Edisto River, S. C. <i>See</i> Edisto River.	
Northern and Northwestern Lakes: <i>See also</i> each particular lake.	
Deep waterway to Atlantic Ocean, examinations and surveys.....	734, 816, 833, 843, 904
Deep waterway to Hudson River, examination and survey.....	795
Dredge boats for, not to be constructed without Congressional authority; repeal.....	1057, 1281
Harbors on, preservation and repair, appropriation for.....	101, 144, 145
Harbors and rivers on, examinations and surveys.....	151, 160, 185, 195
International Waterways Commission, creation of, and expenses and salaries of American members, for investigation, etc., regarding uses, levels, etc., of waters of, including tributaries (<i>see also</i> Boards, etc.).....	992, 1007, 1205, 1294
International Waterways Commission, rental of rooms in Washington by American members.....	1282
Raft-towing on the, and connecting waters, investigation regarding.....	657
Ship channel in waters connecting, between Chicago, Duluth, and Buffalo, examinations and surveys.....	591, 1129
Ship channel in waters connecting, between Chicago, Duluth, and Buffalo, improvement	639, 668, 669, 732, 804, 809
Ship channel in waters connecting, between Chicago, Duluth, and Buffalo, project for improvement to embrace all work pertaining to St. Clair Flats Canal, Mich.....	639, 701
Transportation routes to the seaboard, survey.....	233
Northern and northwestern rivers. <i>See</i> Western, etc., rivers.	
North Fork, Edisto River, S. C. <i>See</i> Edisto River.	
North Fork, Forked Deer River, Tenn. <i>See</i> Forked Deer River.	
North Fork, Kentucky River, Ky. <i>See</i> Kentucky River.	
North Fork, Lewis River, Wash. <i>See</i> Lewis River.	
North Fork, Skagit River, Wash. <i>See</i> Puget Sound and tributaries and Skagit River.	
North Haven Harbor, Me., examination and survey.....	1128
North Hero Harbor and Island, Vt. <i>See</i> Champlain Lake.	

	Page.
North Landing River, Va. and N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examination and survey	278
Improvement	295, 313, 341, 370
North Mississippi Traction Company, dams of	1148
North Palouse River, Wash., examination and survey	528
North Plymouth, Mass. <i>See</i> Plymouth Bay and Harbor.	
Northport Harbor, N. Y., examination	795
North (Tolomato) River, Fla. <i>See</i> St. Augustine Harbor.	
North River, Salem, Mass. <i>See</i> Salem Harbor.	
North River, Scituate, Mass. <i>See</i> Scituate Harbor.	
North River, Mich., examination and survey	466
North (Hudson) River, N. Y. <i>See</i> Hudson River and New York Bay and Harbor.	
North River, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Improvement	275, 297, 313, 342, 370, 448, 499
Waterway from Norfolk Harbor to Albemarle Sound, via. <i>See</i> Norfolk Harbor.	
North River, Wash.:	
Examinations and surveys	595, 720, 796
Improvement (under Willapa River)	708, 884
Improvement, diversion of funds from appropriation for Willapa River and Harbor	1004
North Tonawanda Harbor, N. Y. <i>See</i> Tonawanda Harbor.	
Northumberland, Pa. <i>See</i> Susquehanna River.	
Northwestern Improvement Company, improvement of Oconto River, Wis., and tributaries by	254
Northwestern rivers. <i>See</i> Western, etc., rivers.	
Northwest Fork (March Hope Creek), Nanticoke River. <i>See</i> Nanticoke River.	
Northwest River, N. C., examinations and surveys	593
Norton, Stephen, relief of	65
Norwalk Harbor and River, Conn.:	
<i>See also</i> Wilsons Point Harbor.	
East Norwalk Harbor, examination and survey	1125
East Norwalk Harbor, improvement	1224
Examinations and surveys	47, 197, 384, 643, 721, 1125
Improvement, including South Norwalk Harbor	207, 217, 232, 242, 276, 285, 307, 333, 361, 396, 436, 485, 548, 680, 747, 846, 954, 1084, 1224
South Norwalk Harbor, examinations and surveys	797, 1125
Norwich Harbor, Conn. <i>See</i> Thames River.	
Notices to alter bridges. <i>See</i> Bridges.	
Nottoway River, Va.:	
Examinations and surveys	278, 595
Improvement	315, 341
Noxubee River, Miss.:	
Examinations and surveys	298, 467, 717
Improvement	322, 343, 372, 405, 450, 502, 567, 630, 696, 772
Nyack Harbor, N. Y.:	
Examination and survey	795
Examination and survey of channel in Hudson River from main channel to Upper Nyack and thence to Sparkill River, etc., via	1277

O.

Oak Bay, Wash. <i>See</i> Puget Sound.	
Oak Creek, Wis. <i>See</i> South Milwaukee Harbor.	
Oak Harbor, Ohio. <i>See</i> Portage River.	
Oakland Harbor, Cal.:	
<i>See also</i> San Francisco Bay and Harbor.	
Donation to U. S. of right to bed of estuary, etc., to precede expenditure of funds	322, 323, 333
Examination and survey	913
Improvement	233
242, 258, 271, 293, 322, 333, 366, 401, 444, 493, 555, 622, 688, 759, 810, 829, 840, 927, 971, 1039, 1058, 1115, 1203, 1264, 1293	
San Antonio Creek, or estuary, examination and survey	219

	Page.
Oak Orchard Creek and Harbor, N. Y.:	
Examinations and surveys	156, 801
Improvement	77,
	80, 85, 100, 122, 162, 183, 192, 203, 213, 228, 238,
	255, 273, 293, 308, 361, 397, 437, 486, 549, 955
Improvement discontinued	1123
Obeds (Obey) River, Tenn. <i>See</i> Obey River.	
Obeils (Obey) River, Tenn. <i>See</i> Obey River.	
Obey River, Tenn.:	
Examinations and surveys	278, 468
Improvement	321, 345, 374
Obion River, Tenn.:	
Below the mouth of Forked Deer River, survey (mentioned indefinitely under Forked Deer River)	802
Examinations and surveys	327, 595, 724, 1020
Improvement	634, 700, 775 ² , 875, 987, 1101, 1247
Obstructions in navigable waters. <i>See</i> Navigable waters and Wrecks.	
Occohannock River, Va., examination and survey	527
Occoquan Creek, or River, Va.:	
Examinations and surveys	209, 527, 1132
Improvement	216,
	231, 240, 267, 563, 626, 693, 768, 866, 977, 1089, 1231
Occupancy of public structures by private parties. <i>See</i> Structures.	
Ocean steamships. <i>See</i> Tolls, Vessels, and Wrecks.	
Ocella (South) Creek, S. C. <i>See</i> Edisto River.	
Ochalochnee (Ocklockonee) River, Fla. and Ga. <i>See</i> Ocklockonee River.	
Ochlochney (Ocklockonee) River, Fla. and Ga. <i>See</i> Ocklockonee River.	
Ocklockonee (Ocklockonee) River, Fla. and Ga. <i>See</i> Ocklockonee River.	
Ocklawaha River, Fla. <i>See</i> Oklawaha River.	
Ocklockonee River, Fla. and Ga.:	
Examinations and surveys	235, 326, 894
Improvement	62
Ocmulgee River, Ga.:	
Examination and survey (limits not defined)	520
Improvement	259,
	270, 291, 314, 343, 371, 405, 449, 500, 566, 628,
	694, 770, 868, 923, 929, 941, 1026, 1092, 1236
Macon to Juliette, examination and survey	1126
Macon, below, examination and survey	124
Macon to Covington, examination and survey	244
Oconee River, Ga.:	
Examinations and surveys	234, 418, 520, 1013, 1126 ²
Improvement	274, 291,
	314, 343, 371, 405, 449, 501, 566, 629,
	695, 770, 868, 925, 979, 1092, 1236
Oconto Harbor and River, Wis.:	
Examinations and surveys	186, 299, 528, 687, 720, 902, 1132
Improvement	338, 366, 400, 442, 492, 621, 687, 758, 859, 969
Improvement, by Northwestern Improvement Co., of river and tributaries across Menominee Indian Reservation	254
Ocracoke Inlet, N. C.:	
Examinations and surveys	34, 525, 801, 917
Improvement	43, 48, 57, 59, 64, 66, 74, 81, 564, 627
Improvement discontinued	1123, 1124
Offenders against laws for protection, etc., of navigable waters. <i>See</i> Navigable waters.	
Office of the Chief of Engineers, Board of Engineers for Rivers and Harbors. <i>See</i> Boards, etc.	
Officers of the Army and Navy. <i>See</i> Army, Engineer, and Naval officers and Boards, etc.	
Officers of the Corps of Engineers. <i>See</i> Army and Engineer officers, Boards, etc., and Reports.	
Ogden Landing, Ohio River, Ky. <i>See</i> Ohio River.	
Ogdensburg Harbor, N. Y.:	
Examinations and surveys	124, 156, 299, 327, 1277
Improvement	162, 183, 192, 204,
	213, 229, 239, 361, 397, 437, 486, 549, 614, 681, 749, 847, 954, 1086, 1226

Ohio Canal, Ohio :	Page.
Expenditure upon, of appropriation for Muskingum River con-	
tingent upon certain expenditures by State-----	1105
Surveys-----	701, 729, 819
Ohio reef, Narragansett Bay, R. I. <i>See</i> Narragansett Bay.	
Ohio River :	
<i>See also</i> Western, etc., rivers.	
Arkansas, Mississippi, and Missouri rivers and. <i>See</i> Mississippi,	
Missouri, and Arkansas rivers, etc., <i>infra</i> .	
Ashland, Ky., harbor of refuge, improvement (<i>see also</i> Ice piers,	
<i>infra</i>)-----	458, 459, 988
Atlantic seaboard, transportation routes to, survey (<i>see also</i> Ches-	
apeake and Ohio and James River and Kanawha canals)-----	233, 243
Beaver, Pa., canal to Lake Erie (Lake Erie and Ohio River Ship	
Canal)-----	1207
Beaver River, Pa., lock and dam near. <i>See</i> Lock and Dam No. 6,	
etc., <i>infra</i> .	
Bellaire, Ohio, harbor of refuge, examination and survey-----	325
Big Hocking (or Hockhocking, etc.) River, Ohio, harbor of refuge.	
<i>See</i> Hocking River, <i>infra</i> .	
Big Miami River, Ohio. <i>See</i> Miami River, <i>infra</i> .	
Big Sandy River, Ky., bar at mouth, examination-----	644
Brandenburg, Ky., to Louisville, laying of conduit pipes across-----	529
Bridges obstructing navigation, modifications required, with cost ;	
legislation necessary to secure alterations ; opinion of Attorney-	
General-----	187, 990
Brooklyn Harbor, Ill., improvement-----	634, 777, 876
Brownsville, Pa., to Pittsburg. <i>See</i> Pittsburg, etc., <i>infra</i> .	
Buck Creek, Ind., to Jeffersonville, Ind., and Louisville, Ky., lay-	
ing of conduit pipes across-----	537
Buffington Island, W. Va., to Pittsburg, Pa. <i>See</i> Pittsburg to Buf-	
fington Island, <i>infra</i> .	
Cairo, Ill., improvement-----	505, 506
Cairo, Ill., to falls at Louisville, Ky. <i>See</i> Falls at Louisville, etc.,	
<i>infra</i> .	
Cairo, Ill., to Green River, Ky. <i>See</i> Green River, <i>infra</i> .	
Cairo, Ill., to Mound City. <i>See</i> Mound City to Cairo, <i>infra</i> .	
Cairo, Ill., to Pittsburg, Pa. <i>See</i> Pittsburg to mouth and Locks, etc.,	
<i>infra</i> .	
Canals, etc., to the Great Lakes and to the seaboard. <i>See</i> Water-	
ways, <i>infra</i> .	
Captina Island, improvement-----	603
Chesapeake and Ohio Canal. <i>See</i> Chesapeake and Ohio Canal.	
Cincinnati, Ohio, between Ludlow and Covington, Ky., and, exami-	
nation and survey-----	644
Cincinnati, Ohio, canal to Lake Erie. <i>See</i> Miami and Erie Canal.	
Cincinnati, Ohio, harbors of refuge at mouths of Crawfish and Mill	
creeks, examinations and surveys-----	669
Cincinnati, Ohio, harbor of refuge, improvement (<i>see also</i> Ice	
harbors, <i>infra</i>)-----	271, 295, 363, 399, 458, 459
Cincinnati, Ohio, harbor of refuge in Little Miami River. <i>See</i>	
Little Miami River.	
Cincinnati, Ohio, Lock and Dam No. 37. <i>See</i> Lock and Dam No.	
37, <i>infra</i> .	
Cincinnati, Ohio, to mouth, improvement-----	229
Cincinnati, Ohio, to Pittsburg, Pa. <i>See</i> Pittsburg to Cincinnati,	
<i>infra</i> .	
Cleveland, Ohio, canal to. <i>See</i> Ohio Canal.	
Covington, Ky. <i>See</i> Cincinnati, <i>supra</i> .	
Crawfish Creek, Cincinnati, Ohio, harbor of refuge. <i>See</i> Cin-	
cinnati, <i>supra</i> .	
Cullums ripple. <i>See</i> Lock and Dam No. 37, <i>infra</i> .	
Cumberland, Md., canal to. <i>See</i> Chesapeake and Ohio Canal.	
Cumberland Island, Ky., improvement of bar below, opposite lower	
Smithland-----	27
Cumberland Island, Ky., improvement (repairs to dam)-----	119, 204
Cumberland road at Brownsville, Pa., to Pittsburg. <i>See</i> Pittsburg	
to Brownsville, <i>infra</i> .	

Ohio River—Continued.

Page.

Dams and locks. <i>See</i> Locks, etc., <i>infra</i> .	
Davis Island, Pa., lock and dam. <i>See</i> Lock and Dam No. 1, <i>infra</i> .	
Davis Island, Pa., pool No. 1. <i>See</i> Pool No. 1, <i>infra</i> .	
Discharge measurements. <i>See</i> Gauging, under Mississippi River.	
Elizabethtown Harbor, Ill., examinations and surveys	328, 644, 722, 1013
Erie Lake, canals to. <i>See</i> Lake Erie and Ohio River Ship Canal,	
Miami and Erie Canal, Ohio Canal, and Wabash and Erie Canal.	
Evansville Harbor, Ind., examinations and surveys	464, 644, 722
Evansville Harbor, Ind., examination and survey for dam	1013
Evansville Harbor, Ind., improvement	701, 777, 876
Evansville, Ind., to Green River, Ky., examination and survey	588
Falls at Louisville, Ky. (Indiana shore), survey for canal	167
Falls at Louisville, Ky. (Indiana and Kentucky shores), survey for additional canal	123
Falls at Louisville, Ky. (Louisville and Portland Canal), acquisition by Kentucky and Indiana Bridge Co. of land for bridge approaches and trestle	611
Falls at Louisville, Ky. (Louisville and Portland Canal), assumption of control, by U. S.; reduction, regulation, and abolishment of tolls	215, 222, 306
Falls at Louisville, Ky. (Louisville and Portland Canal), available toll funds, and those to be collected prior to abolishment of tolls, to be expended for improvement	323
Falls at Louisville, Ky. (Louisville and Portland Canal), examination as to condition of work, and provisions necessary to remove financial incumbrance; reduction of tolls	204
Falls at Louisville, Ky. (Louisville and Portland Canal), examination, etc., of dry dock	464
Falls at Louisville, Ky. (Louisville and Portland Canal), operating and care (permanent indefinite appropriations)	346, 347
Falls at Louisville, Ky. (Louisville and Portland Canal), operating and care (specific appropriation)	350
Falls at Louisville, Ky. (Louisville and Portland Canal), partition of land (Rowans Basin) owned by John Echols and U. S.	428
Falls at Louisville, Ky. (Louisville and Portland Canal), payment to Illinois Central R. R. for damages, by blasting, to Union Depot, etc	1138
Falls at Louisville, Ky. (Louisville and Portland Canal), president and directors authorized to enlarge canal, and to construct branch canal; tolls	139
Falls at Louisville, Ky. (Louisville and Portland Canal), regulations for use and administration of	416, 533
Falls at Louisville, Ky. (Louisville and Portland Canal), Sand Island. <i>See</i> Sand Island, <i>infra</i> .	
Falls at Louisville, Ky. (Louisville and Portland Canal), subscription to stock, voting for president and directors, and receipt of tolls by U. S.	31, 50
Falls at Louisville, Ky. (Louisville and Portland Canal), survey for completion	167
Falls at Louisville, Ky. (Louisville and Portland Canal), survey for enlargement and extension	123
Falls at Louisville, Ky. (Louisville and Portland Canal), use of basin and buildings by Byrne & Speed	601
Falls at Louisville, Ky. (Louisville and Portland Canal and Indiana Chute), examination and survey for alteration of dams at head of	1013
Falls at Louisville, Ky. (Louisville and Portland Canal, dams and rock removal, and Indiana Chute), improvement	171, 175, 176, 177, 183, 188, 190, 193, 200, 204, 214, 215, 222, 239, 316, 323, 337, 408, 453, 506, 507, 572 ² , 634 ² , 700 ² , 776, 812, 830, 841, 988, 1103, 1105, 1251 ²
Falls at Louisville, Ky., to mouth, improvement	71, 75, 81, 86, 100
Falls at Louisville, Ky., to mouth, survey, maps, and charts	22
Falls at Louisville, Ky., to Pittsburg. <i>See</i> Pittsburg to falls, <i>infra</i> .	
Fish Creek Island, improvement	603
Flint Island, improvement of bar $1\frac{1}{4}$ miles below	27
Fourmile bar, harbor of refuge. <i>See</i> Cincinnati, <i>supra</i> .	

Ohio River—Continued.	Page.
Freedom, Pa., harbor of refuge, examination and survey-----	385
French Island, improvement of bar 2 miles above-----	27
Gallipolis, Ohio, harbor of refuge, improvement (<i>see also</i> Ice harbors, <i>infra</i>)-----	458, 459, 988
Gauging. <i>See</i> Gauging, under Mississippi River.	
Golconda Harbor, Ill., improvement-----	777, 876
Grand Chain, examinations and surveys-----	156, 388
Grand Chain, improvement-----	40, 271, 291, 316, 337, 414, 458
Great Kanawha River, canal to connect Ohio and James rivers.	
<i>See</i> James River and Kanawha Canal.	
Great Kanawha River, W. Va., harbor of refuge at mouth. <i>See</i> Point Pleasant, <i>infra</i> .	
Great Miami River, Ohio. <i>See</i> Miami River, <i>infra</i> .	
Green River, Ky., below, dam. <i>See</i> Locks and dams, <i>infra</i> .	
Green River, Ky., to Cairo, Ill., survey-----	1105, 1106
Green River, Ky., to Evansville, Ind. <i>See</i> Evansville to Green River, <i>supra</i> .	
Gulf of Mexico. <i>See</i> Mexico, Gulf of, <i>infra</i> .	
Guyan River, W. Va., 3 miles above, to Ironton. <i>See</i> Ironton, <i>infra</i> .	
Harbors of refuge. <i>See</i> Ice piers, <i>infra</i> , and the various harbors of refuge under this heading.	
Hartford, W. Va., harbor of refuge, improvement (<i>see also</i> Ice piers, <i>infra</i>)-----	701, 988
Henderson Harbor, Ky., examination and survey for dam-----	1013
Henderson Harbor, Ky., improvement-----	27
Hocking River, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>infra</i>)-----	777, 988, 1105
Home City, Ohio, Lock and Dam No. 37. <i>See</i> Lock and Dam 37, <i>infra</i> .	
Hurricane Island, Ill., examination and survey-----	328
Ice piers, removal of deposits (<i>see also</i> the various harbors of refuge, under this heading)-----	988
Indiana Chute, Ind. <i>See</i> Falls at Louisville, etc., <i>supra</i> .	
Ironton, Ohio, examination-----	719
Ironton, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)-----	458, 459, 988
Ironton, Ohio, to 3 miles above Guyan River, examination and survey-----	647
James River and Kanawha Canal. <i>See</i> James River and Kanawha Canal.	
Jeffersonville, Ind., improvement-----	414
Jeffersonville, Ind., to Buck Creek. <i>See</i> Buck Creek, etc., <i>supra</i> .	
Kanawha Canal, James River and. <i>See</i> James River and Kanawha Canal.	
Kanawha River, W. Va., harbor of refuge at mouth. <i>See</i> Point Pleasant, <i>infra</i> .	
Kentucky Chute, Ky. <i>See</i> Smithland Harbor, <i>infra</i> .	
Kerr Run, Ohio, harbor of refuge. <i>See</i> Pomeroy, <i>infra</i> .	
Lake Erie and Ohio River Ship Canal-----	1207
Lawrenceburg Harbor, Ind., examination and survey-----	419
Lawrenceburg Harbor, Ind., improvement (Miami River embankment). <i>See</i> Miami River, <i>infra</i> .	
Licking River, Ky., harbor of refuge. <i>See</i> Licking River.	
Licking River, Ky., mouth, examination and survey-----	419
Licking River, Ky., mouth, improvement-----	458, 459, 505, 506, 571, 572
Limestone Creek, Ky., mouth. <i>See</i> Maysville, <i>infra</i> .	
Little Chain, examination and survey-----	388
Little Kanawha River, W. Va., harbor of refuge at mouth. <i>See</i> Parkersburg, <i>infra</i> .	
Little Miami River, Ohio, harbor of refuge. <i>See</i> Little Miami River.	
Livingston Point, Ky., to Tennessee Island. <i>See</i> Paducah Harbor.	
Lock and Dam No. 1 (Davis Island, Pa.), division line, etc., between U. S. land and that of Pittsburgh, Fort Wayne and Chicago R. R.-----	650

Ohio River—Continued.		Page.
Lock and Dam No. 1 (Davis Island, Pa.), improvement	239,	239,
	291, 816, 337, 356, 414, 458, 459, 505, 506	
Lock and Dam No. 1 (Davis Island, Pa.), reconveyance of land to Thomas Mulvihill		394
Locks and dams between Dams Nos. 1 (Davis Island) and 6 (below Beaver, Pa.), examination and survey		647
Locks and Dams Nos. 2, 3, 4, and 5, improvement		776.
	811, 830, 841, 927, 988, 1040, 1106, 1203	
Locks and Dams Nos. 3, 4, and 5, examination and survey		723
Lock and Dam No. 6 (below Beaver, Pa.), improvement		562,
	634, 701, 731, 776 ² , 813, 988, 989, 1203, 1249	
Lock and Dam No. 7, improvement		989
Locks and dams between Marietta, Ohio, and mouth, survey		802
Locks and dams (Nos. 7 to 18) between Marietta, Ohio, and Pittsburg, Pa., survey		777
Lock and Dam No. 8, improvement	989, 1040, 1059, 1106, 1203, 1249	
Lock and Dam No. 11, improvement	989, 1040, 1059, 1106, 1203, 1250	
Lock and Dam No. 13, improvement		876,
	929, 941, 1026, 1037, 1134, 1199, 1200, 1250, 1292	
Lock and Dam No. 18, improvement		877,
	929, 941, 1026, 1037, 1134, 1199, 1200, 1250, 1292	
Lock and Dam No. 19, improvement		990, 1106, 1250 ²
Locks and dams (Nos. 19 to 38) between Marietta, Ohio, and Miami River, surveys		876, 918
Lock and Dam No. 26, improvement		1106, 1250
Lock and Dam No. 37, examination and survey		837
Lock and Dam No. 37, improvement	989, 1040, 1136, 1250, 1292	
Lock and dam below Green River, Ky., examination and survey		1013
Locks and dams, Louisville and Portland Canal. <i>See</i> Falls at Louisville, Ky., etc., <i>supra</i> .		
Locks and dams, Pittsburg, Pa., below, examination and survey		499
Locks and dams, Pittsburg, Pa., to mouth, survey for 6 and 9 foot depths		1105
Louisville, Ky., falls at. <i>See</i> Falls at Louisville, <i>supra</i> .		
Louisville, Ky., gauging. <i>See</i> Gauging, under Mississippi River.		
Louisville, Ky., Indiana Chute. <i>See</i> Falls at Louisville, etc., <i>supra</i> .		
Louisville, Ky., Rowans Basin (land adjoining Louisville and Portland Canal). <i>See</i> Falls at Louisville, etc., <i>supra</i> .		
Louisville, Ky., to Brandenburg. <i>See</i> Brandenburg to Louisville, <i>supra</i> .		
Louisville, Ky., to Buck Creek, Ind. <i>See</i> Buck Creek, etc., <i>supra</i> .		
Louisville and Portland Canal. <i>See</i> Falls at Louisville, etc., <i>supra</i> .		
Ludlow, Ky. <i>See</i> Cincinnati, <i>supra</i> .		
Madison Harbor, Ind., alteration of dams at Louisville, Ky., resulting in increased depth up to, etc. <i>See</i> Falls at Louisville, <i>supra</i> .		
Madison Harbor, Ind., improvement	505, 506, 571, 572, 876	
Madison Harbor, Ind., survey		876
Marietta, Ohio, to mouth, survey		802
Marietta, Ohio, to Pittsburg and to mouth of the Miami, locks and dams. <i>See</i> Locks, etc., <i>supra</i> .		
Maysville, Ky., examination and survey		465
Maysville, Ky., harbor of refuge, examination and survey		917
Maysville, Ky., harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)		988, 1105
Merriam bar, improvement		603
Metropolis, Ill., examination and survey		1127
Mexico, Gulf of, transportation route to, survey		233
Miami and Erie Canal. <i>See</i> Miami and Erie Canal.		
Miami Extension Canal. <i>See</i> Miami and Erie Canal.		
Miami River, Ohio, bar at mouth, examination and survey. <i>See</i> Lawrenceburg Harbor, <i>supra</i> .		
Miami River, Ohio, mouth (Lawrenceburg embankment), improvement	459, 506, 572, 634, 876, 1251	

Ohio River—Continued.

Page.

Miami River, Ohio, locks and dams above and below. <i>See</i> Locks, etc., <i>supra</i> .	
Michigan Lake, canal to Wabash River, Ind., examination and survey	244
Middleport, Ohio, at and near, improvement	1105
Middleport, Ohio, harbor of refuge, examination and survey	386
Middleport, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)	458, 459, 701, 777, 988 ^a
Mill Creek, Cincinnati, Ohio, harbor of refuge. <i>See</i> Cincinnati, <i>supra</i> .	
Mississippi bend, improvement of bar below Willow Island	27
Mississippi River and, improvement	35, 44, 51, 53, 57, 60 ^a , 69, 75 ^a
Mississippi and Missouri rivers and, improvement	59, 60 ^a , 64, 67, 71, 82
Mississippi, Missouri, and Arkansas rivers and, improvement	96, 98, 100, 119, 152
Missouri and Mississippi rivers and. <i>See</i> Mississippi and Missouri rivers, etc., <i>supra</i> .	
Missouri, Mississippi, and Arkansas rivers and. <i>See</i> Mississippi, Missouri, and Arkansas rivers, etc., <i>supra</i> .	
Mound City Harbor, Ill., examination and survey	1013
Mound City Harbor, Ill., improvement	634, 777, 876
Mound City, Ill., to Cairo, examinations and surveys	894, 1013
Mound City, Ill., to Cairo, improvement (fiscal-year appropriation)	1028
Mouth. <i>See</i> Cairo, <i>supra</i> .	
Muskingum River, harbor of refuge. <i>See</i> Muskingum River.	
Neville Island, Neville Township, Pa., closure of channel on south side of	253, 1009
New Albany Harbor, Ind., examination and survey	419
New Liberty, Ill., surveys	876, 894
Ogden Landing, Ky., examination and survey	1014
Ohio Canal. <i>See</i> Ohio Canal.	
Owensboro Harbor, Ky., examinations and surveys	419, 520, 588
Paducah Harbor, Ky. <i>See</i> Paducah Harbor.	
Parkersburg, W. Va., harbor of refuge at mouth of Little Kanawha River, examinations and surveys	298, 328
Pittsburg, Pa., below, slack-water improvements, etc. <i>See</i> Locks, etc., <i>supra</i> .	
Pittsburg, Pa., canal to Lake Erie (Lake Erie and Ohio River Ship Canal)	1207
Pittsburg Harbor, Pa., improvement, etc. <i>See</i> Locks, etc., <i>supra</i> , Pool No. 1, <i>infra</i> , and Pittsburg Harbor.	
Pittsburg, Pa., to Brownsville, improvement	60
Pittsburg, Pa., to Buffington Island, W. Va., examination and survey	155
Pittsburg, Pa., to Cincinnati, Ohio, improvement	229
Pittsburg, Pa., to Cumberland road. <i>See</i> Pittsburg to Brownsville, <i>supra</i> .	
Pittsburg, Pa., to falls at Louisville, improvement	71, 75, 81, 86, 100, 112, 115
Pittsburg, Pa., to Marietta, Ohio, locks and dams. <i>See</i> Locks, etc., <i>supra</i> .	
Pittsburg, Pa., to mouth, open-channel improvement, reversion to fund for, of appropriations for Dams 19 and 26; repeal	1106, 1250
Pittsburg, Pa., to mouth, open-channel improvement (<i>see also</i> Snag boats, <i>infra</i>)	27, 40, 57, 75, 119, 163, 171, 175, 183, 193, 204, 214, 229, 239, 261, 271, 291, 316, 337, 374, 414, 458, 505, 571, 634, 701, 777, 875, 876, 939, 988, 1105, 1249
Pittsburg, Pa., to mouth, slack-water improvements, etc. <i>See</i> Locks, etc., <i>supra</i> .	
Pittsburg, Pa., to Potomac River, Cumberland, Md., and Chesapeake and Ohio Canal. <i>See</i> Chesapeake and Ohio Canal.	
Point Pleasant, W. Va., harbor of refuge at mouth of Kanawha River, examination and survey	328
Point Pleasant, W. Va., harbor of refuge at mouth of Kanawha River, improvement (<i>see also</i> Ice piers, <i>supra</i>)	403, 414

Ohio River—Continued.		Page.
Pomeroy and Pomeroy Center, Ohio, harbor of refuge (at Kerr Run, etc.), improvement (<i>see also</i> Ice piers, <i>supra</i>)	458, 459, 571, 701, 988	
Pool No. 1 (Davis Island, Pittsburg Harbor, Pa.), examination	989	
Pool No. 6, improvement	1105	
Portland, Ky., to Louisville, canal. <i>See</i> Falls at Louisville, etc., <i>supra</i> .		
Portsmouth, Ohio, canal to Lake Erie. <i>See</i> Ohio Canal.		
Portsmouth, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)	505, 506, 571, 572, 988	
Potomac River, D. C., canal to. <i>See</i> Chesapeake and Ohio Canal.		
Ripley, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)	571, 572, 988	
Rochester, Pa., harbor of refuge, examination and survey	385	
Rowans Basin (land adjoining Louisville and Portland Canal). <i>See</i> Falls at Louisville, <i>supra</i> .		
Sand Island, Ky., acquisition of	917, 1014	
Seaboards, Atlantic and Gulf, water routes to. <i>See</i> Atlantic seaboard and Mexico, Gulf of, <i>supra</i> .		
Shawneetown Harbor, Ill., examination and survey	419	
Shawneetown Harbor, Ill., improvement	505, 506, 571, 572, 634, 701, 830, 876, 988	
Slack-water improvements. <i>See</i> Locks, etc., <i>supra</i> .		
Smithland Harbor, Ky., examination and survey	588	
Smithland Harbor, Ky., improvement (repairs to dam) at Cumberland Island	119, 204	
Smithland Harbor, Ky., improvement of bar below Cumberland Island	27	
Snag boats, operation of, under permanent annual appropriation; itemized statements of expenditures to accompany annual reports	584, 791, 939	
Straight Island, improvement of bar below	27	
Syracuse, Ohio, harbor of refuge, improvement (<i>see also</i> Ice piers, <i>supra</i>)	701, 777, 988	
Tennessee Island, Ky., to Livingston Point. <i>See</i> Paducah Harbor.		
Toledo, Ohio, canal to. <i>See</i> Miami and Erie Canal.		
Transportation routes to the seaboard, surveys	233, 243	
Twin Island (above the falls at Louisville), improvement	112	
Water-level observations. <i>See</i> Gauging, under Mississippi River.		
Waterways to the Atlantic seaboard and Gulf of Mexico. <i>See</i> Atlantic seaboard and Mexico, Gulf of, <i>supra</i> .		
Waterways to the Great Lakes. <i>See</i> Michigan Lake, <i>supra</i> , and Lake Erie and Ohio River Ship Canal, Miami and Erie Canal, Ohio Canal, and Wabash and Erie Canal.		
Wells Island, erection of dam	115	
Willow Island, improvement of bar below	27	
Wrecks, snags, etc., removal of. <i>See</i> Snag boats, <i>supra</i> .		
Ohio, State of:		
<i>See also</i> Lake Erie and Ohio River Ship Canal, Miami and Erie Canal, and Ohio Canal.		
Expenditure of Government appropriation for Muskingum River contingent upon certain expenditures upon Ohio Canal by	1105	
Grant to, of land at Mercer County and Loramie reservoirs, Miami and Erie Canal	1068	
Proceeds of sales of certain lands granted to, to be applied to certain internal improvements	92	
Proceeds of sales of certain lands in, granted to Indiana, to be applied to Miami and Erie section of Wabash and Erie Canal	39, 68	
Transfer to U. S. of State rights, franchises, and property relating to improvement of Muskingum River	454	
Okanogan River, Wash.:		
Examinations and surveys	720, 803	
Examination and survey (under Columbia River)	1132	
Improvement	884, 1004, 1119, 1268	
Okaw (Kaskaskia) River, Ill. <i>See</i> Kaskaskia River.		

	Page.
Oklawaha River, Fla.:	
Examinations and surveys-----	519, 1126
Improvement-----	70, 567, 630, 695, 771, 869, 980, 1094, 1237
Olcott Harbor, N. Y.:	
Examinations and surveys-----	156, 1017
Improvement-----	162, 183, 192, 203, 213, 229, 238, 334, 437, 486, 549, 955
Old Canal (New Orleans to Lake Pontchartrain), La. <i>See</i> Pontchartrain Lake.	
Old Fort Bayou, Miss., examination and survey-----	646
Oldmans Creek, N. J., examinations and surveys-----	795, 898, 1276
Old South River, N. J. <i>See</i> South River.	
Old Tampa Bay, Fla. <i>See</i> Tampa Bay and Harbor.	
Old Town Creek, Miss.:	
Examination and survey-----	353
Improvement-----	381
Olympia Harbor, Wash.:	
Deschutes River, examination and survey-----	762
Examinations and surveys-----	423, 596, 1132
Improvement-----	622, 688, 762, 861, 971
Omaha, Nebr. <i>See</i> Missouri River.	
Omberg, J. A., jr., lock and dam of-----	1194
Onancock Creek (or River) and Harbor, Va.:	
Examinations and surveys-----	278, 527, 1280
Improvement-----	296, 308, 551, 616
Onset Bay and Harbor, Mass., examinations and survey-----	716, 1015
Ontario Lake:	
<i>See also</i> Northern and Northwestern Lakes.	
Canal to Lake Erie, around Niagara Falls, etc., surveys-----	167, 523
Dredge boat, appropriation for-----	122, 129
Harbors between Genesee and Oswego rivers, surveys-----	43
Harbors on, improvement-----	144, 145
Ontonagon Harbor and River, Mich.:	
Examinations and surveys-----	800, 1016, 1275
Improvement-----	163, 181, 227, 236, 255, 270, 291, 310, 337, 365, 400, 442, 491, 554, 619, 686, 756, 968, 1106, 1251
Oostenaula River, Ga.:	
Improvement-----	236, 240, 270, 291, 314, 343, 371, 979
Rome to Coosawattee River, examination and survey-----	196
Orange, Tex. <i>See</i> Sabine River.	
Orange Creek, or River, Fla. <i>See</i> Orange River, or Creek.	
Orange Mills, Fla. <i>See</i> St. Johns River.	
Orange River, or Creek, Fla.:	
Examinations and surveys-----	793, 894, 1273
Improvement-----	980, 1094, 1238
Oregon (gunboat), removal of wreck of (under Chefuncte River)-----	205
Oregon Inlet, N. C., examination and survey-----	355
Oregon Paving and Contract Company, cancellation of contract-----	606
Oregon, State of:	
Contribution by, of funds for upper Columbia and Snake rivers-----	1266
Construction by, of portage railroad on U. S. lands at the Cascades of the Columbia-----	609
Dredge boat for harbors and coast waters-----	1266
Formation of State government; certain proceeds of sales of lands to be applied to internal improvements-----	138
Osage City, Mo. <i>See</i> Osage River.	
Osage River, Mo. and Kans.:	
Above Benton-St. Clair county line, Mo., declared not navigable----	1023
Above immediate vicinity of Warsaw, Mo., declared not navigable--	1043
Dam of city of Warsaw, Mo-----	932
Examinations and surveys-----	185, 421, 467, 523, 1276
Improvement-----	195, 204, 214, 229, 275, 296, 317, 347, 457, 513, 578, 639, 705, 785, 881, 929, 1000, 1001, 1115, 1263
Payment to Pollard & Wallace for plant leased, etc., at lock and dam near Osage City, Mo-----	1213
Oswegatchie River, N. Y. <i>See</i> Ogdensburg Harbor.	

Oswego Bay, Harbor, and River, N. Y.:	Page.
Assent of Congress to construction of wharves.....	176
Contract with R. Nelson Gere, cancellation of.....	199
Examinations and surveys.....	34, 734, 1017
Harbors between Genesee River and, including, surveys.....	43
Improvement.....	37,
42, 51, 56 ⁴ , 59, 64, 67, 74, 80, 85, 100, 122, 145, 153, 162, 171, 175,	
176, 177, 183, 192, 204, 213, 229, 238, 258, 273, 293, 308, 335, 361,	
397, 437, 486, 549, 614, 668, 681, 734, 749, 847, 925, 954, 1086, 1226	
Otsego, Minn. <i>See</i> Mississippi River.	
Otter Creek, Vt.:	
Examination and survey.....	195
Improvement.....	204, 239, 277, 286, 311, 338, 366, 494, 558, 623, 689, 762, 861
Ottertail Lake and River, Minn. <i>See</i> Red River of the North.	
Ouachita River, Ark. and La.:	
Camden, Ark., above, examinations and surveys.....	463, 643
Camden Harbor, Ark., examination and survey.....	913
Camden Harbor, Ark., improvement.....	633
Camden, Ark., to Arkadelphia, examination and survey.....	386
Camden, Ark., to mouth (Trinity, La.), examinations and surveys..	196
	388, 465
Head of navigation to mouth (Trinity, La.), examinations and sur- veys.....	518, 699, 774, 874, 985
Improvement, including locks and dams.....	191,
192, 204 ⁴ , 214, 257, 268, 288, 315, 345, 373, 407, 452, 503,	
504, 570, 633, 699, 774, 874, 985, 1040, 1100, 1136, 1200, 1242	
Monroe Harbor, La., examination and survey.....	388
Monroe Harbor, La., improvement (open-channel work).....	407
Rockport, Ark., to Arkansas-Louisiana boundary, examination and survey.....	185
Trenton Harbor, La., examination and survey.....	388
Owendaw River, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Waterway from Charleston to Santee River and to and opposite McClellanville, via Wando River, Bulls Bay, Alligator Creek, or River, and. <i>See</i> Charleston Harbor.	
Owensboro Harbor, Ky. <i>See</i> Ohio River.	
Owlshead Harbor, Me.:	
Examinations and surveys.....	76, 420, 645
Improvement.....	123, 137
Ox Bow bend, Missouri River, Mont. <i>See</i> Missouri River.	
Ox Bow Power Company, dam of.....	1061, 1295
Oyster Bay, N. Y., channel to Lloyds Harbor and Cold Spring Bay, examination.....	795
Oyster Bay, Tex., waterway from Galveston Bay to Brazos River, via. <i>See</i> Galveston Bay and Harbor.	
Oyster Creek, Tex.:	
Examination and survey.....	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Oyster Harbor, Va., examination and survey.....	1021
Oyster River, N. H., examination.....	795
Oysters:	
Fishing or dredging for shellfish, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Prohibition against depositing of refuse, etc., matter upon lands used for cultivation of.....	1122, 1123

P.

Pacific coast:

Deep-water harbor, etc., at San Pedro Bay or at Santa Monica Bay, Cal. <i>See</i> Santa Monica Bay and Wilmington Harbor.	
Deep-water harbor between Points Dume and Capistrano, examina- tion and survey.....	555

	Page.
Pacific coast—Continued.	
Harbors of refuge at Fort Ross Cove, Fishrock Harbor, Fishs Mill Cove, Trinidad Harbor, Shelter Cove, etc., Cal, examinations and surveys.....	519
Harbor of refuge between San Francisco and Strait of Juan de Fuca. <i>See</i> Port Orford Harbor.	
Harbors and rivers, examinations and surveys.....	151, 160, 185, 195
Interoceanic canal across isthmus of Panama, surveys for.....	884, 885 ^a
Lookout, Cape, Oreg., harbor of refuge. <i>See</i> Lookout, Cape.	
Neah Bay, Wash., harbor of refuge. <i>See</i> Neah Bay.	
Port Orford, Oreg., harbor of refuge. <i>See</i> Port Orford Harbor.	
Padilla Bay, Wash. <i>See</i> Swinomish Slough.	
Padre Island, Tex., deep-water harbor off. <i>See</i> Corpus Christi and Padre Island Harbor Company.	
Paducah Harbor, Ky.:	
Examinations and surveys.....	419, 876
Ice harbor, examination and survey.....	465
Ohio River between Livingston Point and Tennessee Island, examination.....	644
Pagan Creek, or River, Va.:	
Examinations and surveys.....	234, 919, 1280
Improvement.....	320, 341, 977, 1090
Palacios, Tex., channel to Matagorda Bay, examination and survey.....	1279
Palmbeach, Fla., surveys.....	737, 797
Palmer, Swan &, payment to.....	112
Palmyra Lake, Mississippi River, La. <i>See</i> Mississippi River.	
Palouse River (North), Wash., examination and survey.....	528
Pamlico River, N. C.:	
Examinations and surveys.....	244, 801, 1130
Improvement.....	78, 86, 257, 287, 313, 342, 371, 404, 448, 499, 564, 627, 693, 769, 867, 978, 1090, 1233
Washington Harbor, examinations and surveys.....	209, 219, 593, 801
Washington Harbor, improvement.....	121
Waterway to Bay River, examination and survey.....	593
Pamlico Sound, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Old House channel to main channel, examination and survey.....	218
Swash channel, near Ocracoke Inlet, survey.....	34
Waterway from Dismal Swamp Canal to Winyah Bay, S. C., via. <i>See</i> Dismal Swamp Canal.	
Waterway from Norfolk, Va., to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Waterway to Beaufort, N. C., improvement.....	81, 86
Waterway to Beaufort Inlet, examinations and surveys. <i>See</i> waterway to Beaufort Inlet, under Norfolk Harbor.	
Waterway to Beaufort Inlet, improvement.....	1233
Waterway to Norfolk, Va., via Pasquotank River. <i>See</i> Norfolk Harbor.	
Pamphlets. <i>See</i> Binding, Books, and Printing.	
Pamunkey River, Va.:	
Examinations and surveys.....	235, 300
Improvement.....	322, 341, 369, 447, 497, 563, 626, 693, 768, 925, 1089, 1231
Panama, isthmus of, surveys, etc., for canal across.....	884, 885 ^a
Paradise Cut, San Joaquin River, Cal. <i>See</i> San Joaquin River.	
Parcels of land owned by the U. S. <i>See</i> Land.	
Parish Creek, Md., examination.....	646
Parkersburg, W. Va. <i>See</i> Ohio River.	
Parkers Head Harbor and channel, Me., examinations and surveys.....	716, 896
Parsonage (Baldwin) Creek, or River, N. Y.:	
Examination and survey of channel to.....	1277
Examination and survey to connect with Long Beach.....	422
Parties, private:	
<i>See also</i> Dredge boats and Navigable waters.	
Acquisition at expense of, of land for locks in connection with dams constructed by.....	1184

	Page.
Parties private—Continued.	
Acquisition at expense of, of land or easements for Government use.....	1162, 1197
Improvement of channels along New Jersey coast by, authority for.....	1206
Improvement of navigable waters by, authority for.....	1005
Improvement of navigable waters by, cases to be reported to Congress.....	1011
Partridge Bay, Mich., examination and survey of Marquette Harbor and vicinity, including, for harbor of refuge.....	1016
Partridge (Pinnepog) River, Mich. <i>See</i> Pinnepog River and Port Crescent.	
Pascagoula Harbor and River, Miss.:	
<i>See also</i> Ship Island Harbor and Pass.	
Application, to dredge boat for Mississippi coast, of improvement funds for.....	1240
East Pascagoula Harbor, examination and survey.....	219
East Pascagoula River, survey.....	123
Harbor, examination and survey.....	354
Improvement..... 37, 43, 59, 273, 296, 314, 343, 372, 406, 450, 502, 567, 630, 696, 772, 870, 930, 982 ² , 1040, 1059, 1097 ² , 1240 ²	
River, examination and survey (limits not defined).....	278
River, Moss Point to anchorage in bay, examination and survey.....	421
River, mouth to Dog River, examination and survey.....	799
Pasquotank River, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examinations and surveys.....	48, 244, 422, 525
Improvement.....	564, 627, 693
Waterway from Dismal Swamp Canal to Winyah Bay, S. C., via. <i>See</i> Dismal Swamp Canal.	
Waterway from Norfolk, Va., to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Waterway from Norfolk, Va., to sounds of North Carolina, via. <i>See</i> Norfolk Harbor.	
Passagassawaukeag River, Me. <i>See</i> Belfast Bay and Harbor.	
Passaic River, N. J.:	
Examination and survey (limits not defined).....	559
Improvement, including Newark Bay to Staten Island Sound.....	206,
217, 231, 241, 256, 276, 286, 312, 320, 339, 367, 402 ² , 445, 495, 559 ² , 624, 690, 764, 863, 925, 975, 1039, 1086, 1135, 1200, 1228 ²	
Newark to Passaic, examination and survey.....	195
Passaic to Paterson, examination and survey.....	385
Staten Island Sound, through Newark Bay, to Montclair and Greenwood Lake Railroad bridge, examination and survey.....	1130
Staten Island Sound, through Newark Bay, to Paterson, examination and survey.....	898
Pass a Loutre, Mississippi River. <i>See</i> Loutre, Pass a, and Passes, under Mississippi River.	
Pass au Heron, Ala. <i>See</i> Dauphin Island-Cedar Point shoal, under Mobile Bay, Harbor, and River.	
Pass Cavallo (or Caballo), Tex. <i>See</i> Cavallo Pass.	
Pass Manchac, La. <i>See</i> Manchac Pass.	
Passo Cavallo (or Caballo), Tex. <i>See</i> Cavallo Pass.	
Patapsco River, Md.:	
<i>See also</i> Baltimore Harbor.	
West Branch, examination and survey.....	279
Patchogue River, N. Y.:	
Channel from Fire Island Inlet, through Great South Bay, to Patchogue. <i>See</i> Great South Bay.	
Examinations and surveys.....	328, 467, 898
Improvement.....	559, 624, 690, 764
Patuxago River, Ala., examination and survey.....	278
Patuxent River, Md.:	
Examinations and surveys.....	466, 896, 1274
Improvement.....	496, 562, 956

Pawcatuck River, R. I. and Conn.:	Page.
See also Little Narragansett Bay.	
Examinations and surveys-----	185, 422, 723
Improvement-----	193,
207, 217, 232, 241, 445, 494, 558, 623, 689, 763, 862, 974, 1084, 1223	
Pawtucket (Seekonk) River, R. I.:	
Examinations and surveys (see also erratum slip on page 385)---	385,
899, 918, 1131	
Expenditure of improvement funds conditioned upon financial con-	
tribution by State of Rhode Island-----	1223
Improvement-----	120, 125, 163,
184, 193, 206, 217, 402, 444, 494, 558, 623, 689, 763, 862, 974, 1084, 1223	
Pawtuxet bar, Providence River, R. I. See Providence Harbor and River.	
Pawtuxet Cove Harbor, R. I. See Pawtuxet Harbor and River.	
Pawtuxet Harbor and River, R. I.:	
Channel between Starve Goat Island and mainland, examination	
and survey-----	594
Examinations and surveys-----	385 (see erratum slip), 648, 1131
Improvement-----	402
Payments. See Appropriations, Bonds, Contracts, Dredge boats, Ex-	
penditures, Labor, and Materials, etc.	
Peace (Pease) Creek, or River, Fla.:	
See also Charlotte Harbor, and Florida State, canal across.	
Examinations and surveys-----	299, 587
Improvement-----	343, 371, 450, 551, 684, 753, 851
Waterway to St. Johns River, examination and survey-----	328
Peaks Island, Portland Harbor, Me. See Portland Harbor.	
Pea River, Ala.:	
Dam of Pea River Power Co. at Elba-----	1141
Examination and survey-----	300
Pea River Power Company-----	1141
Pearl Harbor, Hawaii:	
Improvement-----	861
Survey-----	815
Pearl River, Miss. and La.:	
See also Ship Island Harbor and Pass.	
Carthage, Miss., above, examination and survey-----	386
Carthage, Miss., to Jackson, improvement-----	296,
314, 344, 372, 450, 502, 568, 630, 696, 772, 871	
Carthage, Miss., to mouth, examination and survey-----	278
Dredge boat for harbors and adjacent channels on coast of Missis-	
sippi-----	1240
Edinburg, Miss., to Carthage, improvement-----	406,
450, 502, 567, 630, 696, 772, 871	
Edinburg, Miss., to Jackson, improvement-----	982, 1097, 1240
Edinburg, Miss., to Lake Burnside, examinations and surveys---	646, 1129
Jackson, Miss., below, improvement-----	320,
344, 372, 406, 450, 502, 568, 630, 696, 772, 871	
Jackson, Miss., near, examination for diversion into Tanyard	
Branch-----	645
Mouth (East Pearl River), examinations and surveys-----	799, 1275
Mouth, improvement-----	406, 450, 502, 568, 871
Mouth (West Pearl River), examination and survey-----	327
Rockport, Miss., below, improvement-----	982, 1097, 1240
Rockport, Miss., to mouth, examination and survey-----	1129
Pease (Peace) Creek, or River, Fla. See Peace Creek, or River.	
Pecatonica River, Wis., examination and survey-----	388
Peck, C. A., payment to-----	392
Pecks Bay, N. J., thoroughfare, etc., from Cape May to Great Bay.	
See Cape May.	
Peconic Bay, N. Y.:	
See also Peconic River.	
Channel to Jamaica Bay, through Great South Bay, examination	
and survey-----	1277

	Page.
Peconic River, N. Y.:	
Channel below Riverhead, examination and survey-----	186
Channel entering Peconic Bay, and channel from Riverhead to Peconic Bay, examination and survey-----	387
Examination and survey for breakwater-----	592
Improvement-----	192, 207, 213
Pedee rivers, S. C. <i>See</i> Great Pedee and Little Pedee rivers.	
Peekskill Harbor, N. Y.:	
Examinations and surveys-----	386, 718
Improvement-----	495, 749, 848, 954, 1085, 1225
Pelican bend, Missouri River. <i>See</i> Missouri River.	
Pelican Spit, Galveston, Tex. <i>See</i> Galveston Bay and Harbor.	
Pembroke Harbor, Me., examinations and surveys-----	523, 645
Penalties:	
<i>See also</i> Bonds.	
Fines and imprisonment for violations of laws for protection, etc., of navigable waters--	517 ² , 581, 583, 584, 887, 889 ² , 890 ² , 891, 908, 1122, 1123
Pend d'Oreille Development Company. <i>See</i> Pend Oreille River.	
Pend Oreille Lake, Idaho, examination and survey of Clark Fork River, including-----	591, 592
Pend Oreille River, Idaho and Wash.:	
Clark Fork River, including, examination and survey-----	591, 592
Dam of Pend d'Oreille Development Co. at Big (Metalline) Falls, Wash-----	1164
Dam of Pend d'Oreille Development Co. at Pierwee Creek, Wash--	1216
Examination and survey (under Columbia River)-----	1132
Flathead Lake to Jocko station (i. e., Flathead River, Mont.), ex- amination-----	717
Improvement-----	884, 1004, 1119, 1268
In Idaho, survey-----	797
Metalline, Wash., to Lake Pend Oreille, examination and survey---	803
Pennamaquan Bay, Me. <i>See</i> Pembroke Harbor.	
Penn, Davidson B., and associates (St. Tammany Water Works Co.)--	359
Pennsylvania, State of:	
Cession to city of Chester of upper and lower ice-harbor piers-----	438
Cession to U. S. of piers and causeway at Chester-----	38
Cession to U. S. of title to Presque Isle peninsula at Erie-----	200, 438
Tonnage duties at Philadelphia for improving Delaware River-----	19
Penobscot Bay, Me., examination and survey for harbor between Macks Point and Cape Jellison-----	1274
Penobscot River, Me.:	
Bangor Harbor, examination and survey-----	1128
Bangor Harbor and, examination and survey-----	385, 798
Bangor to Bucksport Narrows, examination and survey-----	466
Bucksport Harbor, examination and survey-----	896
Bucksport Harbor, improvement-----	949
Bucksport Narrows, examination and survey-----	896
Examination and survey (limits not defined)-----	590
Hampden, above, examination and survey-----	156
Improvement, including Bangor Harbor-----	184.
207, 217, 232, 242, 256, 275, 285, 396, 444, 494, 557, 622, 861, 1220	
Oldtown to Medway and vicinity, examination and survey-----	218
South Branch (Marsh River). <i>See</i> Marsh River.	
Whitehead to Bangor, survey-----	47
Pensacola Bay and Harbor, Fla.:	
Examinations and surveys-----	275, 418, 464, 1273
Improvement-----	275, 288, 308, 350,
363, 398, 439, 489, 551, 617, 683, 753, 851, 926, 961, 1093, 1237	
Survey for route to Bon Secours Bay-----	61
Survey for route to Mobile Bay-----	61
Pensaukee Harbor and River, Wis.:	
Examination and survey-----	208
Improvement-----	380, 401, 758
Improvement discontinued-----	1008
Pensauken Creek, N. J., examinations and surveys-----	384, 593

Pentwater Harbor, Mich.:	Page.
Examination and survey.....	1128
Improvement.....	163, 176, 177, 182, 191, 202, 212, 255, 272, 292, 310, 337, 365, 400, 442, 491, 554, 619, 686, 756, 857, 968, 1107, 1252
Maintenance of depth sufficient to accommodate dredge <i>Gillespie</i> ---	1252
Peoria, Ill. <i>See</i> Illinois River.	
Pepin Lake and village, Mississippi River, Minn. and Wis. <i>See</i> Mississippi River.	
Pepperell Cove, Portsmouth Harbor, N. H. <i>See</i> Portsmouth Harbor.	
Pequonnock (Poquonock) River, Conn. <i>See</i> Bridgeport Harbor.	
Percentage and reimbursement basis of payment in hiring of private dredging plants.....	1281
Pere Marquette Harbor and Lake, Mich. <i>See</i> Ludington Harbor.	
Pere Marquette Lumber Company, donation of land for improvement of Ludington Harbor.....	491
Permanent appropriations. <i>See</i> Appropriations.	
Permanent International Commission of Congresses of Navigation.....	1027
Permits. <i>See</i> Leases, Navigable waters, and Property.	
Perquimans River, N. C.:	
Examinations and surveys.....	244, 422, 1018
Improvement.....	258, 1090
Perrault, Maj. P. H., payment to.....	66
Perriwig bar, Delaware River. <i>See</i> Delaware Bay and River.	
Personal service, acceptance of, forbidden, except in certain emergencies..	394
Persons, private. <i>See</i> Parties.	
Perth Amboy, N. J. <i>See</i> Raritan Bay.	
Petaluma Creek, Cal.:	
Examinations and surveys.....	299, 793, 1125
Improvement.....	321, 348, 378, 514, 579, 640, 706, 883, 1001, 1116, 1265
Petersburg, Va. <i>See</i> Appomattox River.	
Peters Neck (Long Beach) Bay, N. Y.:	
Examination and survey.....	467
Examination and survey of channel from Peters Neck Point, through, to Horn River.....	1277
Peters Neck Point, N. Y. <i>See</i> Peters Neck Bay.	
Petite Anse Bayou, La., examination and survey.....	389
Petit Jean River, Ark.:	
Examinations and surveys.....	185, 418
Improvement.....	452, 504, 633
Petoskey Harbor, Mich.:	
<i>See also</i> Little Traverse Bay.	
Examination and survey.....	522
Improvement.....	554, 620, 686, 757, 858, 968, 1108, 1252
Petty Island, Delaware River, Pa. <i>See</i> Philadelphia, under Delaware Bay and River.	
Phalia (Falia), Bogue, La. <i>See</i> Falia, Bogue.	
Phalia, Bogue, Miss., examinations and surveys.....	522, 717
Philadelphia Harbor, Pa. <i>See</i> Delaware Bay and River, Frankford Creek, and Schuylkill River.	
Philippine Commission.....	1029, 1030, 1063, 1064
Philippine Islands, improvement of rivers and harbors, and erection of various structures in aid of commerce; control of property and rights acquired from Spain.....	1029, 1030, 1063, 1064
Photographs. <i>See</i> Illustrations.	
Piankatank River, Va., examination and survey.....	384
Piedras Negras (Porfirio Diaz), Mex. <i>See</i> Rio Grande River.	
Pierhead lines. <i>See</i> Harbor lines.	
Piermont, N. Y. <i>See</i> Hudson River.	
Pierre Bayou, La.:	
Examinations and surveys.....	279, 389, 406, 451
Improvement.....	373
Pierre Bayou, Miss.:	
Examination and survey.....	421
Improvement.....	451
Pierre, Fort, S. Dak. <i>See</i> Fort Pierre, under Missouri River.	
Piers. <i>See</i> Structures,	

	Page.
Pigeon bayous, La.:	
Examinations and surveys. <i>See</i> Grand Lake (route to Bayou Plaquemine), under Atchafalaya River.	
Improvement (under Plaquemine Bayou)-----	632, 697, 773, 1097, 1241
Pigeon River, Mich.:	
<i>See also</i> Caseville Harbor.	
Examination and survey-----	466
Pigeon River, Minn., improvement by Pigeon River Improvement, Slide and Boom Co-----	942
Pigeon River Improvement, Slide and Boom Company. <i>See</i> Pigeon River, Minn.	
Pike Creek, Calumet, Wis. <i>See</i> Calumet Harbor, under Fox River.	
Pike Creek, Kenosha, Wis. <i>See</i> Kenosha Harbor.	
Pike Rapids Power Company, dam of-----	1165, 1282
Piles Creek, N. J., examination and survey-----	1129
Pine Bluff, Ark. <i>See</i> Arkansas River.	
Pine Island Harbor, or Sound, Fla. <i>See</i> Puntarasa Harbor.	
Pine Lake (Charlevoix County), Mich. <i>See</i> Charlevoix Harbor.	
Pine River (Bay County), Mich., examinations and surveys-----	186, 209
Pine River (Charlevoix County), Mich. <i>See</i> Charlevoix Harbor.	
Pine River (St. Clair County), Mich.:	
Examinations and surveys-----	219, 420
Improvement-----	242, 778, 877
St. Clair Harbor, examinations and surveys-----	522, 646, 722
Pine River, Minn., reservoir. <i>See</i> Reservoirs, under Mississippi River.	
Pinnebog River, Mich.:	
<i>See also</i> Port Crescent.	
Examination and survey-----	466
Pinole, Point, Cal. <i>See</i> San Pablo Bay.	
Pipes, mining, etc., in forest reserves, rights of way-----	1063
Piscataqua River, Me. and N. H.:	
<i>See also</i> Portsmouth Harbor.	
Examinations and surveys-----	34, 388, 389
Hendersons Point. <i>See</i> Portsmouth Harbor.	
Piscataway Creek (Prince George County), Md., examinations and surveys-----	388, 589
Piscataway Creek (Essex County), Va., examinations and surveys-----	388, 595
Pishtaka (Fox) River, Ill. and Wis. <i>See</i> Fox River.	
Pittsburg Harbor, Pa.:	
<i>See also</i> Allegheny, Monongahela, and Ohio rivers, and Chesapeake and Ohio Canal.	
Davis Island pool. <i>See</i> Pool No. 1, under Ohio River.	
Improvement-----	230, 849, 956, 1087, 1229
Pittsburgh, Fort Wayne and Chicago R. R. Co., division line, etc., between U. S. land and that of, at Davis Island dam, Ohio River, Pa.---	650
Planes of reference, depths referred to mean low water----	884, 1005, 1121, 1270
Plans. <i>See</i> Rivers and harbors.	
Plant:	
Rivers and harbors. <i>See</i> Appropriations, Contracts, Dredge boats, Materials and plant, Property, Proposals, and Structures.	
Water, etc., in forest reserves, rights of way-----	1063
Plantation Creek, Ga.:	
Examination and survey of, for route between Altamaha River and Brunswick-----	1013
Improvement of, for route between Altamaha River and Brunswick-----	1236
Plants, water hyacinths. <i>See</i> Water hyacinths.	
Plaquemine Bayou, La.:	
Examinations and surveys-----	326, 419, 465
Improvement ---	382, 503, 569, 632, 697, 773, 812, 841, 927, 940, 1097, 1201, 1241
Route to Grand Lake, examination and survey-----	465
Separation between Mississippi and Red rivers at present junction, and maintaining navigation between the same through, examination-----	704
Water hyacinths, removal of. <i>See</i> Water hyacinths.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	

	Page.
Plaquemine Brule Bayou, La., examination and survey-----	1274
Plattsburg Harbor, N. Y.:	
<i>See also</i> Champlain Lake.	
Examinations and surveys-----	422, 524, 592
Improvement-----	77, 80, 85,
99, 100, 145, 162, 183, 192, 204, 213, 229, 285, 308, 438, 486, 549, 955	
Plattsmouth, Nebr. <i>See</i> Missouri River.	
Pleasant Bay, east shore of Cape Cod, Mass., examination for harbor of refuge (under Cape Cod)-----	953
Pleasant River, Me.:	
Examination and survey-----	523
Improvement-----	557
Plumb Beach Channel, Long Island, N. Y. <i>See</i> Dead Horse Inlet.	
Plumb Island Bridge and Turnpike Company, relief of-----	96
Plymouth Bay and Harbor, Mass.:	
<i>See also</i> Duxbury and Kingston harbors.	
Examinations and surveys-----	420, 716, 794, 1275
Examination and survey of Goose Point channel to public wharf at Kingston-----	521
Improvement-----	28, 80, 31, 52, 56,
58, 64, 66, 71, 74, 87, 120, 145, 184, 194, 207, 218, 232, 242, 275, 285,	
307, 333, 360, 396, 436, 484, 546, 612, 613, 678, 745, 799, 845, 952	
Plymouth Beach, Mass. <i>See</i> Plymouth Bay and Harbor.	
Plymouth Harbor, Mass. <i>See</i> Plymouth Bay and Harbor.	
Pocomoke River, Md.:	
Canal to Indian River, Del., examination-----	715
Examinations and surveys-----	386, 420
Improvement-----	269, 295, 446, 767, 865, 957, 1088, 1230
Waterway to Sinepuxent Bay, examinations and surveys-----	646, 722
Pocomoke Sound, Md., examination and survey-----	420
Pocoson River, N. C. <i>See</i> Contentnia Creek, or River.	
Poinsett Lake, S. Dak., survey for reservoir-----	918, 920
Point Allerton, Boston Harbor, Mass. <i>See</i> Allerton Point, under Bos- ton Harbor.	
Point Capistrano, Cal. <i>See</i> Deep-water harbor, under Pacific coast.	
Point Dume, Cal. <i>See</i> Deep-water harbor, under Pacific coast.	
Pointe aux Barques, Mich., examination and survey-----	1016
Point Isabel Tex. <i>See</i> Laguna Madre.	
Point Judith Harbor and Pond, R. I.:	
Harbor of refuge, examinations and surveys-----	527, 802, 952, 1222
Harbor of refuge, improvement-----	547,
613, 668, 669, 725, 732, 805, 809, 952, 1083, 1203, 1222	
Pond entrance, examinations and surveys-----	218, 527, 953
Pond entrance, improvement-----	613, 679, 953, 1083, 1222
Pond, inner harbor, examinations and surveys-----	648, 802
Point Judith Lake (Pond), R. I. <i>See</i> Point Judith Harbor and Pond.	
Point Judith Pond, R. I. <i>See</i> Point Judith Harbor and Pond.	
Point Mugu, Cal. <i>See</i> Santa Barbara Channel and Harbor.	
Point of Pines, Lynn Harbor, Mass. <i>See</i> Lynn Harbor.	
Point Pinole, Cal. <i>See</i> San Pablo Bay.	
Point Pleasant, W. Va. <i>See</i> Ohio River.	
Point Wilson, Cal. <i>See</i> San Pablo Bay.	
Pokegama Falls, Mississippi River, Minn., reservoir. <i>See</i> Reservoirs, under Mississippi River.	
Pollard & Wallace, payment to-----	1213
Pomeroy, Ohio. <i>See</i> Ohio River.	
Pomeroy Center, Ohio. <i>See</i> Ohio River.	
Ponce Harbor, P. R.:	
<i>See also</i> Porto Rico.	
Examination and survey-----	1133
Ponchatoula River, La. <i>See</i> Tickfaw River.	
Pond River, Ky.:	
Construction of locks and dams by Anton Brucken-----	1031
Examinations and surveys-----	464, 1014

	Page.
Pontchartrain Lake, La.:	
Carondelet Canal, to Mississippi River, survey and improvement ----	20
Grant to St. Tammany Water Works Co. of right of way to lay conduits, etc., under, and thence to New Orleans-----	359
Harbor near New Orleans, improvement-----	121
Harbor of refuge near outlet of New Canal, survey-----	300
Harbor of refuge near outlets of Old and New basins, examinations--	645
Middle Ground shoals, near the Rigolets, examination and survey--	589
Route from Bayou St. John to Ship Island, Miss., via the Rigolets, examination and survey-----	186
Transportation routes to the seaboard, survey (<i>see also</i> Canals, etc.)	233
West End, Spanish Fort, and Milneburg to draws of New Orleans and Northeastern R. R., also to Mandeville, the Tangipahoa, and Pass Manchac, examination and survey-----	1273
West End to mouth of Bayou St. John, and thence to Milneburg, examination and survey-----	1274
Pools Nos. 1 and 6, Ohio River. <i>See</i> Ohio River.	
Poquonock River, Conn. <i>See</i> Bridgeport Harbor.	
Porcupine Island, Bar Harbor, Me. <i>See</i> Bar Harbor.	
Porfirio Diaz, Mex. <i>See</i> Rio Grande River.	
Portage, Wis. <i>See</i> Wisconsin River.	
Portage Canal, Fox and Wisconsin rivers, Wis. <i>See</i> Fox and Wisconsin rivers.	
Portage Lake (Houghton County), Mich.:	
Waterway via. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Establishment of harbor lines-----	543, 557, 591
Portage Lake and Lake Superior canals, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Portage Lake and Lake Superior Ship Canal Company:	
<i>See also</i> Keweenaw Bay-Lake Superior waterway.	
Grant of land for use of, in construction of Keweenaw Bay-Lake Superior waterway-----	148, 158, 178, 189, 199, 220
Portage Lake and River Improvement Company Canal, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Portage Lake Harbor (Manistee County), Mich.:	
Examination and survey-----	279
Improvement-- 296, 310, 337, 365, 400, 442, 491, 554, 686, 756, 857, 929, 967, 1252	
Portage River (Houghton County), Mich., waterway via. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Portage River, Ohio:	
<i>See also</i> Port Clinton Harbor.	
Examination and survey to Oak Harbor bridge-----	1018
Port Arthur Canal, Tex.:	
Acquisition of, from Port Arthur Channel and Dock Co.; wharfage charges-----	1181
Connection with Sabine Lake, through Taylors Bayou, widening of canal, etc. <i>See</i> Sabine River.	
Port Arthur Channel and Dock Company. <i>See</i> Port Arthur Canal and Sabine River.	
Port Austin, Mich., examinations and surveys-----	208, 522
Port Bolivar, Tex. <i>See</i> Galveston Bay and Harbor.	
Port Byron, Ill. <i>See</i> Mississippi River.	
Port charges. <i>See</i> Tolls.	
Port Chester Harbor, N. Y.:	
Examinations and surveys-----	195, 718, 899, 1277
Improvement----- 206, 361, 487, 549, 614, 681, 749, 848, 954, 1084, 1224	
Port Clinton Harbor, Ohio:	
Acquisition of land adjoining west pier-----	441, 618
Examinations and surveys-----	165, 186
Improvement----- 203, 238, 260, 268, 293,	
309, 335, 364, 440, 441, 490, 553, 618, 685, 755, 856, 965, 1104, 1248	
Port Crescent, Mich.:	
<i>See also</i> Pinnepog River.	
Examination and survey-----	208
Port Day, N. Y. <i>See</i> Niagara River.	
Port Deposit, Md. <i>See</i> Susquehanna River.	

Porter, Fort, Buffalo, N. Y., waterworks tunnel under Black Rock Harbor and, to Lake Erie. <i>See</i> Buffalo Harbor.	Page.
Porter shoals, Flint River, Ga. <i>See</i> Flint River.	
Port Harford, Cal. <i>See</i> San Luis Obispo Harbor.	
Port Henry Harbor, N. Y.:	
<i>See also</i> Champlain Lake.	
Examinations and surveys-----	244, 352, 387
Port Hope Harbor, Mich., examination and survey-----	186
Port Huron, Mich. <i>See</i> Black River (St. Clair County).	
Port Jefferson Harbor and Inlet, N. Y.:	
Examinations and surveys-----	120, 186, 524
Improvement -----	192, 207, 241, 260,
276, 285, 308, 334, 361, 549, 615, 681, 749, 848, 954, 1084, 1224	
Portland, Ky., canal to Louisville. <i>See</i> Falls at Louisville, etc., under Ohio River.	
Portland Canal, or Channel, Alaska, survey-----	762
Portland General Electric Light Company, rights of, at Willamette Falls Canal; acquisition of canal, etc., by U. S.-----	899, 1019
Portland Harbor, Me.:	
Back Cove, improvement-----	435, 483, 545, 611, 677, 744, 1133, 1134
Examinations and surveys, including Back Cove and Fore River---	645,
741, 915, 1128	
Harbor of refuge between Boston, Mass., and. <i>See</i> Sandy Bay.	
Improvement, including Fore River-----	76,
80, 86, 120, 152, 169, 184, 194, 207, 217, 232, 242, 350, 360,	
396, 435, 483, 545, 611, 744, 809, 828, 940, 1133, 1199, 1291	
Passage between Peaks and Great Diamond islands, from main channel to Husseys Sound, examination and survey-----	1274
Portland (Barcelona) Harbor, N. Y., improvement-----	77, 80, 85, 104
Port Lavaca, Tex., examination and survey of channel from Pass Cavallo to (<i>see also</i> Lavaca Bay)-----	1279
Port Los Angeles, Cal. <i>See</i> Santa Monica Bay and Harbor.	
Port Marshall Harbor, N. Y.:	
<i>See also</i> Champlain Lake.	
Examination and survey-----	387
Port Norfolk, Va. <i>See</i> Norfolk Harbor.	
Port O'Connor, Tex., examination and survey from Pass Cavallo to, for harbor-----	1279
Port Ontario Harbor, N. Y. <i>See</i> Salmon River, Mexico Bay.	
Port Orford Harbor, Oreg.:	
Examinations and surveys-----	208, 281, 556, 723, 801
Improvement -----	297, 383, 556, 761
Porto Rico:	
<i>See also</i> Great Harbor (Culebra Island) and Mayaguez, Ponce, and San Juan harbors.	
Construction by private parties, on lands of U. S. under water, of wharves, piers, etc., and filling in and dredging of such lands--	1171, 1271
Harbor areas, navigable waters, and submerged lands underlying the same, jurisdiction of Federal Government-----	1030
Port Penn (Reedy Island) Harbor, Del. <i>See</i> Delaware Bay and River.	
Port Ropes Company-----	651
Port Royal bar, S. C. <i>See</i> Port Royal Sound.	
Port Royal (Beaufort) River, S. C. <i>See</i> Beaufort Harbor and River.	
Port Royal Sound, S. C., examination and survey of Port Royal bar---	1020
Port Sanilac Harbor, Mich., examination and survey-----	522
Portsmouth Harbor, N. H.:	
Examination and survey (purpose or limits not defined)-----	277
From the sea to the wharf, examination and survey-----	421
Gerrish Island-Wood Island breakwater, examination and survey--	219
Goat Island ledge (Pull-and-be-damned Point), examination and survey -----	898
Goat Island-Newcastle breakwater, examination and survey-----	388
Hendersons Point, Piscataqua River, examination and survey-----	916
Improvement -----	24, 296, 307, 333, 360, 396, 435, 484, 546
Payment to Isaac A. Sylvester for damages, etc., to plant-----	391
Pepperell Cove, examinations and surveys-----	590, 1274
Sunken rocks, or ledge, examination and survey for pier-----	24

	Page.
Portsmouth Harbor, Ohio. <i>See</i> Ohio River.	
Portsmouth Harbor, Va. <i>See</i> Norfolk Harbor.	
Ports of entry, location of each work with reference to nearest, and amount of revenue collected, to be stated in annual reports-----	155, 164
Port Tampa, Fla. <i>See</i> Tampa Bay and Harbor.	
Port Tobacco Creek, or River, Md. : <i>See also</i> Chapel Point Harbor.	
Examination and survey-----	388
Port Townsend Bay, Wash. <i>See</i> Puget Sound.	
Port Washington Harbor, Wis. : Examinations and surveys-----	901, 1022
Improvement-----	182, 190, 202, 212, 227, 237, 258, 271, 292, 311, 338, 366, 401, 442, 492, 554, 621, 687, 758, 859, 969
Port Wing Harbor (Flag Lake and River), Wis. : Examinations and surveys-----	720, 796, 902
Improvement-----	970, 1111, 1258
Potecasi Creek, N. C., examination-----	795
Potohunk River, N. C., examination and survey-----	647
Potomac Creek, Va., examination and survey-----	595
Potomac River : Alexandria Canal, D. C. and Va., improvement-----	82
Alexandria Harbor, Va., channel in Hunting Creek and thence to Maryland shore, examination and survey-----	1021
Alexandria Harbor, Va., channel to Maryland shore, examination and survey-----	528
Alexandria Harbor, Va., examination and survey for removal of bar-----	1279
Chapel Point Harbor, Md. <i>See</i> Chapel Point Harbor.	
Chesapeake and Ohio Canal. <i>See</i> Chesapeake and Ohio Canal.	
Cockpit Point, Va., examination and survey-----	423
Colonial Beach, Va., examination and survey-----	423
District of Columbia. <i>See</i> Washington, <i>infra</i> .	
Eastern Branch, Md. and D. C. <i>See</i> Anacostia River.	
Georgetown, D. C. <i>See</i> Washington, <i>infra</i> .	
Harpers Ferry, W. Va., right of way of Winchester and Potomac R. R. not to injure canals at-----	65
Lower Cedar Point, Md., to, examination and survey-----	1274
Mount Vernon, Va., examination and survey-----	1279
Mount Vernon, Va., improvement-----	297, 312, 341, 496, 562
North Branch, W. Va. and Md., canal via. <i>See</i> Chesapeake and Ohio Canal.	
Pohick Creek, Va., mouth of, examination and survey-----	326
South Branch, W. Va., canal via. <i>See</i> Chesapeake and Ohio Canal.	
South Branch, W. Va., examination and survey-----	528
Washington, D. C., anchorage of vessels-----	1151
Washington, D. C., at and below, improvement, etc., rental of office-----	768
Washington, D. C., below, examinations and surveys-----	596, 1279
Washington, D. C., below, improvement-----	865, 930, 941, 1089
Washington, D. C., deposits of ballast or refuse matter into, including tributaries, prohibition regarding-----	743
Washington, D. C., examinations and surveys-----	115, 165, 198, 354
Washington, D. C., harbor lines to be determined by Chief of Engineers and Commissioners of the District, and approved by Secretary of War-----	903, 904
Washington, D. C., improvement-----	63, 185, 212, 233, 276, 287, 308, 334, 368, 403, 438, 470, 496, 562, 626, 692, 768, 865, 977, 1089, 1231
Washington, D. C., title to flats, examination, suits, etc., regarding-----	368, 369, 438, 439, 470
Potonowut (Potowomut) River, R. I. <i>See</i> Potowomut River.	
Potosi, Wis., grant of land for improving Grant River at-----	101
Potosi Canal, Wis. <i>See</i> Potosi.	
Potowannet (Potowomut) River, R. I. <i>See</i> Potowomut River.	
Potowomut River, R. I. : Examination and survey-----	328
Improvement-----	339
Pottawatomie Lake, Mich. <i>See</i> New Buffalo Harbor.	

Potts Point, South Harpswell, Me., examination and survey of ledge off-----	Page. 1274
Pound River, Va., examination and survey (under Big Sandy River)-----	1279
Powell, Capt. Charles F., cancellation of contract with Oregon Paying and Contract Co-----	606
Powells River, Va. and Tenn., examinations and surveys-----	245, 325, 900
Power dams. <i>See Dams and Structures.</i>	
Power plants in forest reserves, rights of way-----	1063
Powow River, Mass.:	
Examination and survey-----	420
Improvement-----	494, 558, 623, 689, 762, 862
Improvement discontinued-----	1123
Prairie du Chien, Wis. <i>See Mississippi River.</i>	
Precious metals, mining for, in Bering Sea, Alaska-----	910, 911
Preservation and repairs:	
<i>See also Arrearages.</i>	
Appropriation for-----	94, 96 ² , 101, 124 ² , 144, 145
Canals, locks, dams, etc., operating and care under permanent indefinite appropriation. <i>See Appropriations.</i>	
Deterioration in works, etc., extent of, to be given in annual reports, with estimated cost of restoration-----	885
Incidental repairs, appropriation for, when not otherwise provided for. <i>See Examinations and surveys.</i>	
Maintenance or restoration, use of appropriations for, as well as for further improvement-----	884, 1005, 1121, 1270
Restoration of improvements, emergency appropriations for-----	911, 912, 925, 1004, 1056, 1121, 1124, 1289
Preservation, etc., of navigable waters, laws for. <i>See Navigable waters.</i>	
Presque Isle Bay, Pa. <i>See Erie Harbor.</i>	
Presque Isle Harbor, Mich. <i>See Marquette Bay and Harbor.</i>	
Presque Isle Harbor and peninsula, Pa. <i>See Erie Harbor.</i>	
Primehook Creek, Del.:	
Examination and survey-----	519
Examination for waterway via-----	643
Princess Bay, Staten Island, N. Y., examination and survey for break-water-----	592
Printing:	
<i>See also Compilations.</i>	
Annual Reports of the Chief of Engineers. <i>See Reports.</i>	
Exclusion from reports of unnecessary matter; certificate as to necessity of, including illustrations-----	726, 1042, 1137
Of reports of examinations and surveys prior to assembling of Congress in December-----	1125, 1213, 1281
Restriction upon printing of books by Executive Departments-----	1138
Private persons. <i>See Parties.</i>	
Proceedings, legal, in cases of violations of laws for protection, etc., of navigable waters. <i>See Attorney-General and District attorneys.</i>	
Proceeds from various sources not paid into Treasury, annual statement regarding-----	1205
Process, swearing out of, in cases of violations of laws for protection, etc., of navigable waters-----	890, 1122, 1123
Projects. <i>See Rivers and harbors and other general subjects.</i>	
Property:	
<i>See also Land, Materials, etc., and Preservation, etc.</i>	
Damage or danger to, from currents deflected by bridge piers or abutments, provisions of law regarding-----	515
Leasing of public, authorized-----	602, 655, 728
Moneys received from various sources and not paid into Treasury, annual statement regarding-----	1205
Occupancy, etc., of public (other than structures), by private persons, cases to be reported to Congress-----	886
Occupancy, etc., of public structures. <i>See Structures.</i>	
Philippine Islands, control of rights, etc., acquired from Spain....	1029, 1030
Sale or transfer of, when not needed-----	1008
Use, etc., of public materials. <i>See Materials.</i>	
Voluntary or personal service, acceptance forbidden, except to prevent destruction of, etc-----	394

Proposals :	Page.
<i>See also Bonds and Contracts.</i>	
Advertisements for, to precede letting of contracts-----	155,
164, 243, 262, 277, 297, 324, 352, 382, 415, 463, 515	
Advertisements may be dispensed with in cases of restoration under emergency appropriation-----	912, 1004, 1005
Combination in single, of two or more separate works--	580, 1006, 1122, 1270
Continuing contracts, authority to invite, when estimates exceed appropriations provided-----	893
Continuing contracts, rejection of disadvantageous bids and issu- ance of new-----	642
Regulations regarding, for contracts under War Department-----	264
To be separate for each work and for each class of material or labor; all bids, with names of bidders, to be reported to Congress.	155, 164
Prosecution of offenders against laws for protection, etc., of navigable waters. <i>See</i> Attorney-General and District attorneys.	
Prosecution of work, when appropriations or authorizations are insuffi- cient for completion-----	1056, 1122, 1271
Prospect (St. Lucia) Inlet, Fla. <i>See</i> St. Lucia Inlet and River.	
Protection, etc., of navigable waters, laws for. <i>See</i> Navigable waters.	
Protection of persons furnishing materials and labor-----	324,
352, 382, 383, 415, 463, 676, 1072	
Providence Harbor and River, R. I. :	
<i>See also</i> Pawtuxet Harbor and River.	
Examinations and surveys-----	123, 208, 740, 899, 1278
Green Jacket shoal, improvement-----	445,
494, 558, 623, 689, 763, 974, 1083, 1203, 1293	
Improvement-----	120, 125, 163,
184, 188, 206, 217, 276 ³ , 285, 311, 339, 367, 402, 445, 494, 558, 623,	
689, 763, 811, 828, 841, 927, 940, 974, 1025, 1083, 1203, 1223, 1293	
Providence Plantation, R. I. <i>See</i> Rhode Island State.	
Providence River, R. I. <i>See</i> Providence Harbor and River.	
Provincetown Harbor, Mass. :	
Examination and survey-----	799
Improvement-----	33, 49, 56, 58, 66, 71, 74, 87,
120, 145, 152, 159, 176, 177, 194, 208, 218, 232, 242, 260, 275, 285,	
307, 333, 360, 396, 436, 484, 546, 612, 678, 745, 845, 952, 1082, 1221	
Publications. <i>See</i> Binding, Books, Compilations, Documents, Illustra- tions, Printing, and Reports.	
Public Health and Marine-Hospital Service :	
Quarantine anchorages-----	1151
Use of pier at Lewes, Del-----	608
Public Printer. <i>See</i> Binding, Books, Documents, Illustrations, Printing, and Reports.	
Public property. <i>See</i> Land, Materials, etc., Preservation and repairs, and Property.	
Public works. <i>See</i> Navigable waters, Preservation and repairs, Rivers and harbors, and other subjects.	
Puget Sound, Wash. :	
Hood Canal to North Bay (Cases Inlet), channel, examination-----	720
Improvement, including tributaries (Skagit, Stilaguamish, Nooksak, Snohomish, Snoqualmie, Duwamish, and Puyallup rivers and Hat Slough, etc.)-----	641, 707, 790, 883, 1004, 1119, 1268
Port Townsend Bay to Oak Bay, channel, examination and survey--	596
Waterway connecting Elliott Bay with Lakes Union and Washing- ton, proposals from Seattle and Lake Washington Waterway Co. for construction of-----	972
Waterway to Grays Harbor, examination and survey-----	1280
Waterway to Lakes Union and Washington, cadastral map-----	733
Waterway to Lakes Union and Washington, construction of, by James A. Moore-----	1170, 1267
Waterway to Lakes Union and Washington, examinations and sur- veys-----	733, 972, 1267
Waterway to Lakes Union and Washington, improvement by U. S.--	708,
733, 790, 972, 1117, 1267	
Waterway to Lakes Union, Washington, and Samamish, examina- tion and survey-----	580

	Page.
Puget Sound Canal, Wash. <i>See</i> Waterway to Lake Union, etc., under Puget Sound.	
Pull-and-be-damned Point, Portsmouth Harbor, N. H. <i>See</i> Portsmouth Harbor.	
Pultneyville Harbor, N. Y.:	
Examination and survey-----	165
Harbors between Genesee and Oswego rivers, including, surveys---	43
Improvement-----	183, 192, 203, 213, 228, 238, 255, 273, 293, 308, 334, 361, 549, 615, 681, 749, 849, 1226
Pungo River, N. C., examination and survey of waterway to Sladesville (on Slades Creek)-----	593
Pungoteague Creek, Va., examination and survey-----	388
Punishments. <i>See</i> Penalties.	
Punta Gorda, Fla. <i>See</i> Charlotte Harbor.	
Puntarasa Harbor, Fla.:	
Examination and survey-----	464
Inside passage to Charlotte Harbor (Pine Island Harbor, or Sound), examinations and surveys-----	793, 894
Inside passage to Charlotte Harbor (Pine Island Harbor, or Sound), improvement-----	695, 980
Purchases. <i>See</i> Appropriations, Bonds, Contracts, Expenditures, Land, Materials, etc.	
Puyallup, Wash. <i>See</i> Puyallup River.	
Puyallup River, Wash.:	
<i>See also</i> Puget Sound and tributaries and Tacoma Harbor.	
Examinations and surveys-----	244, 423, 595, 803, 1280
Puyallup waterway, Tacoma Harbor, Wash. <i>See</i> Tacoma Harbor.	

Q.

Quanicassee River, Mich., examination and survey-----	522
Quantico Bay and Creek, Va., examinations and surveys-----	197, 384, 527, 720, 919, 1132
Quarantine anchorages. <i>See</i> Public Health and Marine-Hospital Service.	
Quarantine Island, Honolulu Harbor, Hawaii. <i>See</i> Honolulu Harbor.	
Quarantine Service. <i>See</i> Public Health and Marine-Hospital Service.	
Queens Creek, Va., examination and survey-----	1279
Queenstown Creek, Md. <i>See</i> Queenstown Harbor.	
Queenstown Harbor, Md.:	
Examinations and surveys-----	187, 896
Improvement-----	193, 206, 295, 751, 957, 1088, 1230
Quillayute Harbor and River, Wash., examinations and surveys-----	720, 803
Quincy Bay and Harbor, Ill. <i>See</i> Mississippi River.	
Quinnipiac River, New Haven, Conn. <i>See</i> New Haven Harbor.	

R.

Raccoon Creek, N. J.:	
Examination and survey-----	898
Improvement-----	381, 975, 1087, 1229
Raccoon River, Ohio, examination-----	647
Racine Harbor, Wis.:	
Effect of wave action, with plans for overcoming same-----	837, 1108
Examinations and surveys-----	165, 528, 803, 837, 968, 1108
Improvement-----	102, 121, 145, 154, 161, 176, 177, 181, 191, 212, 227, 237, 262, 271, 292, 311, 338, 366, 401, 442, 492, 555, 621, 687, 758, 859, 930, 968, 1110, 1256
Racine reef, Wis. <i>See</i> Racine Harbor.	
Rafts:	
<i>See also</i> Wrecks.	
Running of, general provisions of law regarding-----	889 ² , 890 ² , 893, 908, 1010
Towing of, on the Great Lakes and connecting waters-----	657
Rahway River, N. J.:	
Examinations and surveys-----	279, 719, 800, 1276
Improvement-----	294, 312, 340, 367

	Page.
Railroads:	
<i>See also</i> Bridges.	
Rights of way, and construction of piers and wharves, in Alaska----	825
Rights of way, etc., through certain water-reserve lands, Mississippi River and tributaries, Minn. and Wis.-----	251, 532, 536, 936
Rainsford Island, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Rainy Lake and River, Minn.:	
Dam of the Koochiching Co.-----	823, 907, 1027, 1074
Dam of the Rainy River Improvement Co.-----	1074
Examination and survey of river-----	1129
Rainy River Improvement Company, dam of, across Rainy River, Minn.	1074
Raisin River, Mich. <i>See</i> Monroe Harbor.	
Rancocas River, N. J.:	
Examinations and surveys-----	325, 718*
Improvement-----	349, 367, 560, 625, 690, 765, 864, 975
Randall, George, relief of. -----	98
Randolph bend, Missouri River, Mo. <i>See</i> Missouri River.	
Rappahannock River, Va.:	
Examinations and surveys-----	122, 185, 1089
Improvement-----	193, 206, 216, 231, 240, 257, 267, 286, 313, 341, 369, 403, 447, 497, 563, 626, 693, 768, 866, 977, 1089, 1232
Relief of B. D. Greene, bondsman of George E. Ward-----	728
Raritan Bay, N. Y. and N. J.:	
<i>See also</i> Keyport Harbor, Princess Bay, and Shoal Harbor.	
Anchorage grounds, establishment, etc., of-----	480, 1151
Examinations and surveys-----	326, 682, 1017
Improvement-----	349, 367, 397, 438, 487, 549, 615, 682, 750, 849, 956, 1086, 1227
Raritan River, N. J.:	
<i>See also</i> New Brunswick Harbor.	
Improvement-----	77, 82, 273, 286 313, 334, 367, 402, 445, 495, 559, 624, 690, 764, 863, 975, 1087, 1228
New Brunswick, below, including the Middle Ground, examination and survey-----	219
Raymond's Index to the Annual Reports of the Chief of Engineers. ----	1010
Read, G. H., payment to. -----	477
Real Estate Bank of Washington, Ark., relief of (under Red River) ----	112
Reappropriations. <i>See</i> Appropriations.	
Receipts:	
<i>See also</i> Materials, etc., and Property.	
Moneys received from various sources, and not paid into Treasury, annual statement regarding-----	1205
Red Bank Creek, Pa., examination and survey. -----	328
Red Bayou, La. (probably one of the four near Gilmer), navigation not to be impaired by operations for removal of Red River raft. -----	142
Red Bayou, La. (the one about 6 miles above Gilmer), waterway from Shreveport to Fulton, via. <i>See</i> Shreveport.	
Red Cedar River, Iowa, survey. -----	90
Redfish bar, Galveston Bay, Tex. <i>See</i> Galveston Bay and Harbor.	
Redfork, Ark. <i>See</i> Arkansas River.	
Red Lake and Red Lake River, Minn.:	
Reservoirs. <i>See</i> Red River of the North.	
River, dam of William J. Murphy-----	1144
River, examinations and surveys-----	466, 717
River, improvement (under Red River of the North)-----	779, 878, 993
Redondo Beach Harbor, Cal., examination and survey. -----	586
Red River, La., Ark., Ind. T., and Tex.:	
<i>See also</i> Western, etc., rivers.	
Alexandria Harbor, La., examinations and surveys-----	235, 389, 871
Alexandria Harbor, La., examination and survey at the falls-----	277
Alexandria Harbor, La., gauging. <i>See</i> Gauging, under Mississippi River.	
Alexandria Harbor, La., improvement.-----	373, 407, 451, 503, 569, 632, 697, 1098
Bayou, etc., outlets, closure of. <i>See</i> Improvement, <i>infra</i> .	
Boyce Landing, La., examination and survey-----	1274
Discharge measurements. <i>See</i> Gauging, under Mississippi River.	
Falls near Alexandria, La. <i>See</i> Alexandria Harbor, <i>supra</i> .	

Red River, La., Ark., Ind. T., and Tex.—Continued.	Page.
Fulton, Ark., above, examination and survey-----	418
Fulton, Ark., gauging. <i>See</i> Gauging, under Mississippi River.	
Fulton, Ark., to the Atchafalaya, examination and survey-----	389,
451, 502, 569, 632, 697	
Fulton, Ark., to Denison, Tex., examination and survey-----	1012
Fulton, Ark., to mouth, examination and survey-----	384
Fulton, Ark., to Washita River, Ind. T., examination and survey--	1246
Gauging. <i>See</i> Gauging, under Mississippi River.	
Improvement-----	43, 59, 67, 72, 75 ² , 81, 84, 92, 108,
112, 119, 125, 127, 142, 205, 215, 230, 240, 258, 264, 269 ² , 288 ² , 295,	
314 ² , 318, 344 ² , 373, 383, 407, 413, 451, 452, 461, 503, 504, 569,	
570, 577, 578, 632, 633, 697, 699, 773, 774, 871, 983, 1098, 1242	
Improvement, assent of Congress to State legislation for removal of the great raft-----	142
Kiamichi River to Blue River, examination and survey-----	900
Mississippi River, separation between, at present junction, and maintaining navigation between the same through Bayou Plaque- mine or by canal, examination-----	704
Mouth, examination and survey-----	344
Mouth, rectification by Mississippi River Commission-----	344,
382, 383, 413, 461, 512, 577, 639, 704, 785, 880, 999	
Mouth, rectification by Mississippi River Commission, authority for allotment to, of funds from appropriations for Mississippi River between Ohio River and Head of Passes-----	1114, 1261
Mouth to above the raft, examination and survey-----	197
Raft, survey-----	57
Raft to Missouri, Kansas and Texas R. R. bridge, examination and survey-----	278
Shreveport, La., improvement-----	632, 983
Shreveport, La., to Denison, Tex., examination and survey-----	912
Water-level observations. <i>See</i> Gauging, under Mississippi River.	
Waterway from Shreveport, La., to Fulton, Ark., via Cypress Bayou and connecting lakes, etc. <i>See</i> Shreveport.	
Red River, Tenn.:	
Examination and survey-----	327
Improvement-----	345
Red River Landing, La. <i>See</i> Mississippi River.	
Red River of the North, Minn. and N. Dak.:	
Breckenridge, Minn., to Fargo, N. Dak., examination and survey--	327
Breckenridge, Minn., to Moorhead, examination and survey-----	235
Control of floods and prevention of bank erosion, examination and survey-----	897
Deepening and straightening of channel, examination and survey--	1278
Diversion of flood waters of, into Minnesota River, examination and survey of Bois de Sioux River, Lake Traverse, and Big Stone Lake for-----	1275
Fargo, N. Dak., to international boundary, examination and survey--	1129
Improvement-----	260, 270, 290,
318, 348 ² , 378 ² , 409, 457, 508, 574, 636, 702, 779, 878, 993, 1111, 1259	
Lock and dam at Goose rapids, construction-----	348, 378, 457
Lock and dam at Goose rapids, examination and survey-----	587
Moorhead, Minn., to Fergus Falls (on Ottertail River), examination and survey-----	466
Moorhead, Minn., to Pembina, N. Dak., examination and survey----	219
Reservoirs in Ottertail Lake and River, examinations and sur- veys-----	794, 879, 1016
Reservoirs in Red Lake and Red Lake River, examinations and surveys-----	794, 879, 1016
Reservoirs, tributaries above Fergus Falls (on Ottertail River) and Crookston, and Big Stone Lake (including Lake Traverse, Red Lake and Red Lake River, Ottertail Lake and River, and Bois de Sioux River), examination and survey-----	591
Redwood Creek (or Slough) and Harbor, Cal.:	
Creek, examinations and surveys-----	385, 586, 797
Creek, improvement-----	579, 1001
Harbor, improvement-----	401, 444, 493

Redwood Slough (Creek); Cal. <i>See</i> Redwood Creek and Harbor.	Page.
Reedy Island Harbor, Del. <i>See</i> Port Penn Harbor, under Delaware Bay and River.	
Reelfoot levee district, Mississippi River. <i>See</i> Mississippi River.	
Reference planes, depths referred to mean low water-----	884, 1005, 1121, 1270
Refuse matter, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Registration (documenting) of foreign-built dredges-----	1163
Regulations and rules:	
Anchorage grounds, Hampton Roads, Va., and adjacent waters----	1151
Anchorage grounds, Kennebec River, Bath, Me.-----	1151
Anchorage grounds, New York Bay and Harbor, Hudson and East rivers, Kill van Kull and Arthur Kill, and Newark and Raritan bays, N. Y. and N. J.-----	480, 1151
Anchorage grounds, Potomac River, at Washington, D. C.-----	1151
Anchorage grounds, quarantine-----	1151
Anchorage grounds and movement of vessels, Chicago Harbor, Ill., and adjacent waters of Lake Michigan-----	657
Anchorage grounds and movement of vessels, St. Marys River, Mich-----	1151
Arthur Kill, N. Y. and N. J., anchorage grounds-----	480, 1151
Bids for contracts under War Department, regulations regarding-----	264
Bridges, opening of draws-----	711, 890, 1008
California, hydraulic mining in, control of-----	659, 1218
Canals and similar works (general), use, administration, and navigation of-----	711, 890, 1008, 1009, 1010
Channels, improved, speed, movement, etc., of vessels, to prevent injury to (general)-----	711, 890, 1008, 1009, 1010
Chicago Harbor, Ill., and adjacent waters of Lake Michigan, anchorage and movement of vessels-----	657
Contracts, proposals for, under War Department, regulations regarding-----	264
Coosa River, Lock and Dam No. 4, Ala., use of water power, etc-----	1169
Des Moines Rapids Canal and dry dock, Iowa. <i>See</i> Mississippi River, <i>infra</i> .	
East River, N. Y., anchorage grounds-----	480
Erie Canal, N. Y., diversion of water for power, etc., purposes-----	1192
Hales bar (Scott Point) lock and dam, etc., Tennessee River. <i>See</i> Tennessee River, <i>infra</i> .	
Hampton Roads, Va., and adjacent waters, anchorage grounds----	1151
Harbor Beach (Sandbeach) harbor of refuge, Mich., use and administration of-----	357
Harlem River, N. Y., opening and closing of draws, including draw of bridge at mouth of Spuyten Duyvil Creek, and height, etc., of pilot houses, flag poles, and smokestacks of tugboats--	558, 559, 763, 764
Hudson River, N. Y., anchorage grounds-----	480
Kennebec River, at Bath, Me., anchorage grounds-----	1151
Kill van Kull, N. Y. and N. J., anchorage grounds-----	480, 1151
Lights, beacons, fog signals, buoys, etc., establishment of, by persons not under control of Light-House Board-----	1182
Logs, rafts, etc., running of, on streams navigated by steamboats, general provisions of law regarding-----	889 ² , 890 ² , 893, 908, 1010
Louisville and Portland Canal, Ky. <i>See</i> Ohio River, <i>infra</i> .	
Michigan Lake, adjacent to and including Chicago Harbor, Ill., anchorage grounds and movement of vessels-----	657
Mississippi River, Des Moines Rapids Canal and dry dock, Iowa, use, administration, and navigation of-----	416, 533, 584, 585
Mississippi River, at mouth, for protection of navigation-----	224
Mississippi River, reservoirs at headwaters, use and administration of-----	510
Mississippi River, South Pass, prevention of obstruction of channel and of injury to works-----	516, 580
Newark Bay, N. Y. and N. J., anchorage grounds-----	480, 1151
New York Bay and Harbor, N. Y., anchorage grounds-----	480, 1151
New York Harbor, N. Y., Ambrose channel, navigation by vessels of certain draft-----	1225
Niagara River, N. Y., and tributaries, diversion of water for power, etc., purposes-----	1192

Regulations and rules—Continued.

	Page.
North (Hudson) River, N. Y., anchorage grounds.....	480
Ohio River, Louisville and Portland Canal, Ky., use, administration, and navigation of.....	416, 533
Philippine Islands, rivers and harbors, and use, etc., of various structures erected in aid of commerce.....	1029, 1030
Potomac River, at Washington, D. C., anchorage grounds.....	1151
Proposals for contracts under War Department, regulations regarding.....	264
Raritan Bay, N. Y. and N. J., anchorage grounds.....	480, 1151
Refuse matter, transportation and dumping into navigable waters.....	1122, 1123
Reservoirs at headwaters of Mississippi River, use and administration of.....	510
St. Clair Flats Canal, Mich., use, administration, and navigation of.....	533
St. Marys Falls Canal, Mich., use, administration, and navigation of.....	416, 533
St. Marys River, Mich., anchorage grounds and movement of vessels.....	1151
St. Marys River, Mich., diversion of water for power purposes.....	992
Sandbeach (Harbor Beach) harbor of refuge, Mich., use and administration of.....	357
Scott Point (Hales bar) lock and dam, etc., Tennessee River. <i>See</i> Tennessee River, <i>infra</i> .	
Snake River, Alaska, navigation, etc., at mouth.....	1120
South Pass, Mississippi River. <i>See</i> Mississippi River, <i>supra</i> .	
Spuyten Duyvil Creek, N. Y. <i>See</i> Harlem River, <i>supra</i> .	
Staten Island Sound (Arthur Kill), N. Y. and N. J., anchorage grounds.....	480, 1151
Tennessee River, Scott Point (Hales bar) lock and dam, etc.....	1050, 1062
Vessels and other craft, speed, movement, etc., in canals and improved channels (general).....	711, 890, 1008, 1009, 1010
Washington, D. C., anchorage grounds in Potomac River.....	1151
White River, Ark., lock and dam above Lock No. 3.....	1194
Rehoboth Bay, Del.:	
Waterway from Chincoteague Bay, Va., to Delaware Bay at Lewes, via. <i>See</i> Chincoteague Bay and Inlet.	
Waterway to Delaware Bay at Lewes, via Lewes Creek and Gordon Lake, examination and survey.....	1273
Reimbursement and percentage basis of payment in hiring of private dredging plants.....	1281
Reiss (C.) Coal Company, payment to, for work at Sheboygan Harbor, Wis.....	687
Renting of public property, etc. <i>See</i> Leases.	
Repairs, preservation, etc. <i>See</i> Arrearages, Examinations and surveys, and Preservation and repairs.	
Repeal of provisions of law concerning prosecution of certain improvements:	
Discontinuance of appropriations for unworthy works, recommendations regarding, to accompany annual reports.....	886
Discontinuance of certain projects.....	1008, 1009, 1123, 1124
Temporary suspension of improvement of Wateree River, S. C.....	1020
Reports:	
Annual, Barren River, Ky., leases for use of surplus water, and of land for mill sites, itemized statements of moneys received to accompany.....	572
Annual, bids for labor or material, list of, with names of bidders, to be reported to Congress.....	155, 164
Annual, etc., bridges, causeways, etc., obstructing navigation, cases to be reported to Congress.....	414, 415, 462
Annual, California Débris Commission.....	660
Annual, canals, locks, dams, etc., operating and care under permanent indefinite appropriation, itemized statements of expenditures to accompany.....	415
Annual, civilian engineers, information relative to employment to be furnished Congress.....	469
Annual estimates. <i>See</i> Estimates, etc.	
Annual, Green River, Ky., leases for use of surplus water, and of land for mill sites, itemized statements of moneys received to accompany.....	572

Reports—Continued.	Page.
Annual, Illinois River, Ill., operation of dredges and snag boats, under permanent annual appropriation; itemized statements of expenditures to accompany-----	516, 517, 1259
Annual, leases of public property to be reported to Congress-----	655
Annual, Mississippi River Commission, requirements regarding submission, etc.-----	340, 382, 391, 393, 462, 517
Annual, Mississippi River, gauging, including principal tributaries, under permanent annual appropriation, itemized statements of expenditures to accompany-----	516, 1009
Annual, Mississippi River, lower, operation of dredges and snag boats, under permanent annual appropriation, itemized statements of expenditures to accompany-----	516, 517
Annual, Mississippi River, South Pass, examinations and surveys, under permanent annual appropriation, itemized statements of expenditures to accompany-----	515, 516, 962
Annual, Mississippi River, South Pass, to contain certain information regarding improvement by James B. Eads-----	249
Annual, Mississippi River, upper, operation of dredges and snag boats, under permanent annual appropriation, itemized statements of expenditures to accompany-----	516, 517, 1259
Annual, Missouri River Commission, requirements regarding submission, etc.-----	411, 517, 1000
Annual, Muskingum River, Ohio, leases for use of surplus water, and of land for mill sites, itemized statements of moneys received to accompany-----	507
Annual, Ohio River snag boats, operation of, under permanent annual appropriation; itemized statements of expenditures to accompany-----	584, 791
Annual, proposals for labor or material, list of, with names of bidders, to be reported to Congress-----	155, 164
Annual, rivers and harbors, Index (Raymond's) to the-----	1010
Annual, etc., rivers and harbors, etc., to be carefully examined before transmittal to Congress and unnecessary matter, including illustrations, excluded; certificate as to necessity of printing-----	726, 1042, 1137
Annual, rivers and harbors, to be in hands of Public Printer by October fifteenth, each year, and be printed, with comprehensive index, by first Monday in December (act of 1888)-----	517
Annual, rivers and harbors, to contain certain information and be submitted to Congress at the commencement of its regular sessions (acts of 1866 and 1867)-----	155, 164, 607
Annual, rivers and harbors, to contain certain information and be submitted to Congress by January first (acts of 1882, 1884)-----	382, 414
Annual, rivers and harbors, to contain certain information and be submitted to Congress by December first (act of 1886)-----	462
Annual, rivers and harbors, to contain recommendations regarding discontinuance of appropriations for unworthy works-----	886
Annual, rivers and harbors, to give extent of deterioration in works, etc., with estimated cost of restoration-----	885
Annual, statement of moneys received from various sources, and not paid into Treasury-----	1205
Annual, etc., use, occupancy, or injury of public structures by private parties, to be reported to Congress-----	263, 414, 462, 886
Books, restriction upon printing of, by Executive Departments (<i>see also</i> Printing, etc., <i>infra</i>)-----	1138
Chief of Engineers, Index (Raymond's) to the-----	1010
Estimates of funds required. <i>See</i> Estimates, etc.	
Examinations and surveys. <i>See</i> Printing and Supplemental, <i>infra</i> , and Examinations and surveys.	
Illustrations, unnecessary, to be excluded from reports to be printed; certificate as to necessity of printing-----	726, 1042, 1137
Index (Raymond's) to Annual Reports of the Chief of Engineers--	1010
New works, for, not to be made unless authorized by Congress----	649,
	724, 791, 884, 1006, 1122, 1271
Printing and binding, requirements regarding exclusion of unnecessary matter; certificate as to necessity of printing, including illustrations-----	726, 1042, 1137

Reports—Continued.	Page.
Printing and binding, restriction upon publication of books by Executive Departments.....	1138
Printing of, upon examinations and surveys, prior to assembling of Congress in December.....	1125, 1213, 1281
Supplemental or additional, on examinations, surveys, projects, or estimates, not to be made after submission of regular reports thereon	649, 724, 791, 884, 1006, 1122, 1271
Surveys and examinations. <i>See</i> Printing and Supplemental, <i>supra</i> , and Examinations and surveys.	
Representatives, House of. <i>See</i> Congress and Documents.	
Reservations, forest. <i>See</i> Forest reserves.	
Reservoirs:	
Big Sioux River, S. Dak. <i>See</i> Big Sioux River.	
Big Stone Lake, Minn. <i>See</i> Minnesota River.	
Bois de Sioux River, Minn. <i>See</i> Red River of the North.	
California, for restraining mining débris. <i>See</i> California Débris Commission and California State.	
Cannon River, Minn. <i>See</i> Cannon River.	
Chippewa River, Wis. <i>See</i> Chippewa River.	
Colorado, State of. <i>See</i> Colorado State.	
Forest reserves. <i>See</i> Forest reserves.	
Goose Lake, Oreg. and Cal., levels. <i>See</i> Goose Lake.	
Gull Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Kampeska Lake, S. Dak. <i>See</i> Kampeska Lake.	
Klamath Indian Reservation, Oreg. <i>See</i> Klamath Indian Reservation.	
Leech Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Little (Lower) Klamath Lake, Oreg. and Cal., levels. <i>See</i> Lower Klamath Lake.	
Long Prairie River, Minn. <i>See</i> Long Prairie River.	
Lower Klamath Lake, Oreg. and Cal., levels. <i>See</i> Lower Klamath Lake.	
Mille Lacs Lake, Minn. <i>See</i> Mille Lacs Lake.	
Minnesota River, Minn. <i>See</i> Minnesota River.	
Mississippi River, headwaters. <i>See</i> Reservoirs, under Mississippi River.	
Missouri River. <i>See</i> Big Sioux River, under Missouri River.	
Ottertail Lake and River, Minn. <i>See</i> Red River of the North.	
Pine River, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Poinsett Lake, S. Dak. <i>See</i> Poinsett Lake.	
Pokegama Falls, Mississippi River, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Red Lake and Red Lake River, Minn. <i>See</i> Red River of the North.	
Red River of the North, Minn. and N. Dak. <i>See</i> Red River of the North.	
Rhett (Tule) Lake, Oreg. and Cal., levels. <i>See</i> Rhett Lake.	
Rio Grande River, N. Mex., irrigation dam at Engle. <i>See</i> Rio Grande River.	
Rock River, Wis. and Ill. <i>See</i> Rock River.	
Rum River, Minn. (Mille Lacs Lake). <i>See</i> Rum River.	
St. Croix River, Wis. and Minn. <i>See</i> St. Croix River and Lake.	
Sandy Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Sioux (Big) River, S. Dak. <i>See</i> Sioux River.	
Traverse Lake, Minn. <i>See</i> Minnesota River.	
Tule (Rhett) Lake, Oreg. and Cal., levels. <i>See</i> Tule Lake.	
Winnibigoshish Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Wisconsin River, Wis. <i>See</i> Wisconsin River.	
Wyoming, in. <i>See</i> Wyoming.	
Yellowstone River, Mont., irrigation dam. <i>See</i> Yellowstone River.	
Resolutions, Congressional. <i>See</i> Congress.	
Restoration, repairs, etc. <i>See</i> Arrearages, Examinations and surveys, and Preservation and repairs.	
Retired officers of the Army and Navy, employment of, by Chief of Engineers.....	792
Revenue, amounts collected at nearest port of entry to be stated for each work in annual reports.....	155, 164

	Page.
Revenue officers, duties, etc., of collectors and other, in enforcement of laws for protection, etc., of navigable waters-----	584, 890, 1122, 1123
Revocable licenses. <i>See</i> Leases, Navigable waters, and Property.	
Rhett (Tule) Lake, Oreg., and Cal., changing of level-----	1066
Rhode Island, State of:	
Expenditure of improvement funds for Pawtucket River conditioned upon financial contribution by-----	1223
Rhode Island and Providence plantations, State of, tonnage duties..	15, 16 ³
Rice Irrigation and Improvement Association, locks and dam in Mermentau River, La-----	1032
Richardsons Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Richland Creek, or River, Tenn.:	
Examinations and surveys-----	900, 1279
Improvement (under Tennessee River)-----	986
Richmond Harbor, Kennebec River, Me.:	
Examination and survey-----	324
Improvement-----	351, 360
Richmond Harbor, Va. <i>See</i> James River.	
Richmond Island Harbor, Cape Elizabeth, Me.:	
Examination and survey-----	165
Improvement-----	120, 207, 218, 242, 275, 285, 307, 333
Ridley Creek, Pa., examination and survey-----	328
Rights of way. <i>See</i> Land.	
Rigolets, the, La., route from Bayou St. John to Ship Island, Miss., via, examination and survey-----	186
Rincon rock, San Francisco Harbor, Cal. <i>See</i> San Francisco Bay and Harbor.	
Rio Grande River, Tex. and N. Mex.:	
Eagle Pass, Tex., overhead wires to Porfirio Diaz, Mex-----	597
Eagle Pass, Tex., water pipes to Porfirio Diaz, Mex-----	598
Embudo, N. Mex., to El Paso, Tex., examination and survey-----	523
Engle, N. Mex., irrigation dam-----	1075
Fort Brown, Tex., improvement-----	254, 294, 373
Waterway to Aransas Pass, examination and survey-----	1127
Waterway to Mississippi River at Donaldsville, La., examination and surveys-----	219, 1127
Waterway to Mississippi River, via Berwick Bay, shortening of route. <i>See</i> Black (tributary to Bayou Boeuf) and Terrebonne bayous.	
Ripley, Ohio. <i>See</i> Ohio River.	
Riverhead, N. Y. <i>See</i> Peconic River.	
River Machine Company, incorporation, etc., of-----	15
River of the Four Lakes, Wis., survey (under Rock River)-----	88
Rivers and harbors:	
<i>See also</i> Dredge boats, Land, Materials, etc., Navigable waters, Preservation and repairs, Property, and other subjects.	
Appropriations to continue available until expended (<i>see also</i> Appropriations)-----	225
Benefits to commerce and navigation from completion of works to be stated in annual reports (<i>see also</i> Commerce)-----	155, 164
Committee on, House of Representatives. <i>See</i> Congress.	
Dredging plants, hiring of private, payment for, in customary manner or on reimbursement and percentage basis (<i>see also</i> Dredge boats)-----	1281
Improvement, appropriations for, use of, for maintenance, repair, or restoration-----	884, 1005, 1121, 1270
Improvement by individuals and corporations, authority, etc., for-----	1005
Improvement by individuals and corporations, cases to be reported to Congress-----	1011
Improvement by State, etc., of channels along New Jersey coast or waters adjacent thereto, authority for-----	1206
Improvement by U. S. of inner harbors, or waters within shore lines or corporate limits, or channels adjacent to wharves, cases to be reported-----	1011
Improvement, combination in single proposals or contracts of two or more separate works-----	580, 1006, 1122, 1270

Rivers and harbors—Continued.

Page.

Improvement, consolidated works, balances, allotments, and expenditures regarding	1005, 1121, 1270
Improvement, deterioration in works, etc., extent of, to be given in annual reports, with estimated cost of restoration	885
Improvement, discontinuance of appropriations for unworthy works, recommendations regarding, to accompany annual reports	886
Improvement, discontinuance of certain projects	1008, 1009, 1123, 1124
Improvement, discontinuance (temporary suspension) of, on Wataeree River, S. C.	1020
Improvements, emergency appropriations for restoration of	911, 912, 925, 1004, 1056, 1121, 1124, 1269
Improvement, etc., Index (Raymond's) to the Annual Reports of the Chief of Engineers	1010
Improvement, laws relating to, compilation of	1010, 1063, 1281
Improvement, projects, etc., for new works not to be made unless authorized by Congress; supplemental or additional reports not to be made after submission of regular ones	649, 724, 791, 884, 1006, 1122, 1271
Improvement, prosecution of work, when appropriations or authorizations are insufficient for completion	1056, 1122, 1271
Laws for protection and preservation of, in force in 1896, compilation of	790
Laws for protection and preservation of, in force in 1907. <i>See</i> the various subheadings under Navigable waters.	
Projects, review of, by Board of Engineers for Rivers and Harbors	1006, 1007, 1124, 1281
Projects under construction or maintenance, compilations containing lists of	791, 792, 1011
Roanoke Inlet, N. C.:	
Connection with the ocean across Bodie Island, improvement	121, 128
Connection with the ocean (at Nags Head), surveys	35, 97, 187
Roanoke River, N. C. and Va.:	
Examinations and surveys	185, 553, 388, 469, 527
Improvement	193, 206, 216, 231, 370, 404, 448, 500, 564, 627, 693, 769, 1090, 1233
Roanoke Sound, N. C.:	
Connection with the ocean across Bodie Island, improvement	121, 128
Connection with the ocean (at Nags Head), surveys	35, 97, 187
Robbins reef light-house, New York Bay, N. Y. <i>See</i> New York Bay and Harbor.	
Robinson, J. P., estate of, construction of bulkhead along Gowanus Creek channel, N. Y.	748
Roche Harbor, Wash., improvement (under Puget Sound)	1119, 1268
Rochepoint, Mo. <i>See</i> Missouri River.	
Rochester, Pa. <i>See</i> Ohio River.	
Rockaway Inlet, N. Y.:	
Channel from Coney Island channel to Jamaica Bay, via, examination and survey	1190
Channel to Coney Island Point, examination and survey	278
Jamaica Bay, including entrance at, examination and survey	1276
Rockcastle River, Ky., examination and survey	235
Rock Creek (Somerset County), Md., examination and survey	354
Rockhall Harbor, Md.:	
Examinations and surveys	589, 722, 896
Improvement	751 ² , 957, 1088, 1230
Rock Island, Ill.:	
<i>See also</i> Mississippi River.	
Canal to Hennepin. <i>See</i> Illinois and Mississippi Canal.	
Rock Island rapids, Mississippi River. <i>See</i> Mississippi River.	
Rockland Harbor, Me.:	
Examinations and surveys	645, 677
Improvement	123, 315, 360, 396, 435, 483, 545, 611, 677, 744, 809, 828
Rockport Harbor, Me.:	
Examinations and surveys	465, 1274
Improvement	483, 546
Rockport Harbor, Mass. <i>See</i> Sandy Bay.	
Rockport Harbor, Tex. <i>See</i> Aransas Bay, Harbor, and Pass.	

	Page.
Rock River, Wis. and Ill.:	
<i>See also</i> Reservoirs, under Mississippi River.	
Bridge at Moline, Ill., construction of, in connection with improvement of Illinois and Mississippi Canal	830
Canal to Lake Winnebago, Fox River, Wis., survey	156
Dams of Edward A. Smith et al. at Lyndon, Ill.	1077, 1217
Dam of Spencer B. Newberry et al. at Grand Detour, Ill.	1140
Dams of Samuel S. Davis at Vandrufts and Carrs islands, Ill.	1152
Examinations and surveys	88, 156 ² , 1013
Illinois and Mississippi Canal, construction, etc., of. <i>See</i> Illinois and Mississippi Canal.	
Illinois and Mississippi Canal feeder, lock and dam at Sterling, Ill., examination and survey	915
Illinois and Mississippi Canal feeder, lock and dam at Sterling, Ill., inclusion of, in canal project	995, 1112
Illinois and Mississippi Canal feeder, power station of Sterling Hydraulic Co. at Sterling dam, Ill.	1260
Milwaukee and Rock River Canal. <i>See</i> Milwaukee and Rock River Canal.	
Reservoirs at headwaters, examination and survey	329
Rock River rapids, Mississippi River. <i>See</i> Rock Island rapids, under Mississippi River.	
Rocks, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Rocky buoy, New Haven Harbor. <i>See</i> New Haven Harbor.	
Rocky River Harbor, Ohio:	
Examinations and surveys	186, 1018, 1278
Improvement	203, 228, 238, 322
Rodicks Island, Bar Harbor, Me. <i>See</i> Bar Harbor.	
Roebuck Lake, Miss., examinations and surveys	389, 1276
Rogers City, Mich., examination and survey for harbor of refuge	1128
Rogue River, Oreg., examinations and surveys	281, 647
Rollingstone Slough, Mississippi River, Wis. <i>See</i> Mississippi River.	
Romerly Marsh, Ga.:	
<i>See also</i> Savannah-Fernandina waterway.	
Examination and survey	326
Improvement	380, 405, 449, 501
Rondeway Bayou, La.:	
Examinations and surveys	386, 465
Improvement	503, 569
Rondout Creek and Harbor, N. Y.:	
Examination and survey	195
Improvement	207, 217, 260, 277, 361, 397, 437, 486, 549, 614, 681, 749, 954, 1085, 1225
Rood, S. R., payment to	330
Roose, Charles, acquisition from, of land at Port Clinton Harbor, Ohio	441, 618
Root River, Wis. <i>See</i> Racine Harbor.	
Root, William F. S., payments to	536, 600
Ropes Pass, Tex., improvement at, by the Port Ropes Co	651
Roslyn Harbor, N. Y., examination	795
Rouge Bayou, La., examination and survey	465
Rouge River, Mich.:	
Examinations and surveys	466, 800, 1128
Improvement	508, 573, 635, 702, 778, 821, 878, 991, 1109, 1253
Turning basin, examination and survey	591
Turning basin, improvement	635, 878
Rough River, Ky.:	
Examination and survey	419
Improvement	572, 634, 700 ² , 776
Round Lake, Mich. <i>See</i> Charlevoix Harbor.	
Round Lake, Minn. <i>See</i> Reservoirs, under Mississippi River.	
Rouse Point Harbor, N. Y.:	
<i>See also</i> Champlain Lake.	
Examinations and surveys	208, 244, 386
Improvement	397, 437, 486, 548, 614
Routes, transportation, to the seaboard. <i>See</i> Canals and Transportation routes.	
Rowans Basin, Louisville and Portland Canal, Ky., partition of land	428
Rowley, Jerome, relief of	197

Royal River, Me.:	Page.
Examinations and surveys-----	185, 716, 798
Improvement-----	194, 207, 380
Rubbish, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Ruffin, W. C., dam of-----	909
Ruggles, Augustus G., payments to-----	431, 477
Rules. <i>See</i> Regulations, etc.	
Rulo, Nebr. <i>See</i> Missouri River.	
Rum Point, N. J. <i>See</i> Atlantic City Harbor.	
Rum River, Minn.:	
Examinations and surveys for canal from Lake Superior to Mississippi River, via-----	703, 897
Mille Lacs Lake, examination for reservoir-----	794
Running of logs, rafts, etc., general provisions of law regarding-----	889 ² ,
	890 ² , 893, 908, 1010
Rush Chute, Mississippi River, Iowa. <i>See</i> Burlington Harbor, under Mississippi River.	
Rush Island bend, Mississippi River, Ill. <i>See</i> Mississippi River.	
Russel Fork (of the Levisa), Big Sandy River, Va. and Ky. <i>See</i> Big Sandy River.	

S.

Sabine Bay (Lake), Tex. <i>See</i> Sabine Lake.	
Sabine City Harbor, Tex. <i>See</i> Sabine Pass Harbor.	
Sabine Lake, Tex.:	
Channel through, to and including mouths of Neches and Sabine rivers. <i>See</i> Neches and Sabine rivers.	
Blue Buck Point bar. <i>See</i> Sabine Pass Harbor.	
Improvement-----	257
Port Arthur Canal. <i>See</i> Port Arthur Canal and Sabine River.	
Waterway from Brazos River and, to Mississippi River. <i>See</i> Sabine Pass Harbor.	
Waterway from Calcasieu Lake, La., via Bayou Black, examination and survey-----	589
Waterway from Calcasieu River, La., to Sabine Pass, examination and survey-----	386
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Waterway to Galveston Bay, examination and survey (<i>see also</i> waterway from the Rio Grande to Mississippi River, under Rio Grande River)-----	209
Sabine Land and Improvement Company, dredging of Sabine Pass Harbor-----	825, 826
Sabine Pass, Tex. <i>See</i> Sabine Pass Harbor.	
Sabine Pass Harbor, Tex.:	
Channels to Neches and Sabine rivers. <i>See</i> Neches and Sabine rivers.	
Dredging of, by Sabine Land and Improvement Co.-----	825, 826
Examinations and surveys-----	123, 209, 353, 919
Improvement-----	243, 257, 268, 288, 315, 344, 363, 399, 440, 489, 552
	617, 684, 734, 754, 810, 815, 820, 828, 840, 855, 926, 927, 962, 1098, 1243
Port Arthur Canal. <i>See</i> Port Arthur Canal and Sabine River.	
Waterway from Calcasieu Lake, La., to Sabine Lake, via Bayou Black, examination and survey-----	589
Waterway from Calcasieu River, La., examination and survey-----	386
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Waterway to Brazos River, and to Mississippi River, examination and survey-----	1127
Waterway to Galveston Bay, examination and survey (<i>see also</i> waterway from the Rio Grande to Mississippi River, under Rio Grande River)-----	209

	Page.
Sabine River, Tex. and La.:	
<i>See also</i> Sabine Lake and Sabine Pass Harbor.	
Examinations and surveys (limits not defined)-----	123
Mouth, examination and survey-----	186
Mouth and above, improvement-----	257,
273, 288, 315, 344, 373, 632, 698, 733, 734, 773, 872	257, 872
Mouth, including channel through Sabine Lake, furnishing of funds by citizens of Beaumont and Orange for improvement-----	983
Mouth, including channel through Sabine Lake and connection with Port Arthur Canal through Taylors Bayou, examinations and surveys-----	353, 648, 719, 802, 873, 1020
Mouth, including channel through Sabine Lake, and connection with Port Arthur Canal through Taylors Bayou, and widening of canal, improvement-----	873, 983 ² , 1045, 1100, 1204, 1243
Mouth, and to Belzora, examination and survey-----	209
Mouth to Belzora and Logansport, examination and survey-----	1274
Mouth to East Hamilton, Tex., examination and survey-----	299
Mouth to Logansport, examination and survey-----	1021
Mouth to Sudduths Bluff, examination and survey-----	595
Port Arthur Canal, inquiry regarding construction of, by Port Arthur Channel and Dock Co.-----	825, 826
Sudduths Bluff to Logansport, La., examination and survey-----	648
Water hyacinths, removal of. <i>See</i> Water hyacinths.	
Sacketts Harbor, N. Y.:	
Examination and survey-----	353
Improvement-----	33, 43, 380, 486, 682
Sack rafts, running of, general provisions of law regarding-----	889 ² , 890 ² , 893, 908, 1010
Saco Harbor and River, Me.:	
Examinations and surveys-----	385, 420
Improvement-----	38, 154, 163, 171, 175, 176, 177, 184, 194, 207, 396, 435, 444, 483, 494, 557, 623, 689, 762, 861
Sacramento River, Cal.:	
Diversion, by Central Canal and Irrigation Co., of water between Swifts Point and Squaw Hill-----	1156
Diversion of funds for dredge for rivers tributary to Suisun and San Pablo bays-----	409, 410, 457
Examination of American River for prevention of sand flowing into, at Sacramento-----	714
Examination and survey, including tributaries, with a view to im- provement in conjunction with State of California-----	1116
Examinations and surveys (limits not defined)-----	299, 586, 787
Hogs Back bar, examination and survey-----	186
Improvement-----	243, 274, 294, 319, 348, 378, 409, 457, 514, 540 (Vol. I), 579, 640, 705, 787, 882, 930, 1001, 1115, 1265
Improvement to be in charge of a Board of Engineers-----	787
Mouth, examination and survey-----	444
Mouth to and including Steamboat Channel, or Slough, examination-----	715
Mouth to Feather River, examination and survey-----	1272
Protection, etc., of, and tributaries from injury from mining débris. <i>See</i> California Débris Commission and California State.	
Receipt and use by U. S. of State dredge, etc., for river and harbor improvements-----	882
Tehama, below, examination and survey-----	234
Sag Harbor, N. Y.:	
Examinations and surveys-----	47, 592, 899
Improvement-----	954, 1084, 1085, 1224
Saginaw River, Mich.:	
Diversion to, of unexpended balances of appropriations for Flint, Shiawassee, and Bad rivers-----	1109
Examinations and surveys-----	235, 244, 777, 800
Improvement-----	154, 161, 171, 175, 182, 233, 237, 259, 272, 293, 318, 348, 375, 408, 454, 507, 573, 635, 701, 777, 877, 991, 1109, 1253
Sailors Encampment, St. Marys River, Mich. <i>See</i> St. Marys River.	
St. Albans Harbor, Vt.:	
<i>See also</i> Champlain Lake.	
Examination and survey-----	1279

	Page.
St. Andrews Bay, Fla.:	
Examinations and surveys.....	519, 1012, 1273
Survey for route to Chattahoochee River.....	61
Survey for route to Choctawhatchee Bay and River.....	61
St. Augustine Creek (Thunderbolt River), Ga., improvement.....	287
St. Augustine Harbor, Fla.:	
Examinations and surveys.....	48, 66, 418, 464, 480, 587
Improvement.....	92, 94, 108, 115, 124, 489, 552, 617, 683
St. Charles, Mo. <i>See</i> Missouri River.	
St. Charles Bay, Tex., examinations and surveys.....	595, 1020
St. Clair Flats Canal, Mich.:	
<i>See also</i> St. Clair River and Northern and Northwestern Lakes.	
Examination and survey.....	916
Improvement.....	122, 133, 153, 161, 171, 175, 176, 177, 182, 192, 203, 213, 272, 293, 318, 454, 507, 573, 990
Improvement, diversion of funds from St. Marys River appropriations.....	992, 1008
Permanent indefinite appropriation for operating and care.....	346, 347
Project for improvement to be embraced in that for Northern and Northwestern Lakes ship channel.....	639, 701
Regulations for use and administration of.....	533
St. Clair Harbor, Mich. <i>See</i> Pine and St. Clair rivers.	
St. Clair Lake, Mich.:	
<i>See also</i> St. Clair River and Northern and Northwestern Lakes.	
Examination and survey.....	328
At mouth of Clinton River, improvement.....	144
Grossepoint channel, examination and survey.....	522
Grossepoint channel, improvement.....	507
Ship channel in waters connecting Great Lakes between Chicago, Duluth, and Buffalo. <i>See</i> Northern and Northwestern Lakes.	
St. Clair River, Mich.:	
<i>See also</i> Northern and Northwestern Lakes.	
Algonac Harbor, examination and survey.....	523
At mouth of Black River. <i>See</i> Black River (St. Clair County).	
At mouth of Pine River. <i>See</i> Pine River (St. Clair County).	
Bridges (railroad) between Lakes Huron and Erie, construction of, with regard to interests of navigation.....	219
Channel between Russell Island and Grand Point, examination and survey.....	1275
Lake Huron to Lake St. Clair, examination and survey.....	420
St. Clair Flats Canal. <i>See</i> St. Clair Flats Canal.	
St. Clair Harbor, examination and survey.....	466
Ship channel in waters connecting Great Lakes between Chicago, Duluth, and Buffalo. <i>See</i> Northern and Northwestern Lakes.	
Uses, levels, etc., of waters of Great Lakes, including. <i>See</i> International Waterways Commission, under Northern and Northwestern Lakes.	
St. Cloud, Minn. <i>See</i> Sauk rapids, under Mississippi River.	
St. Cloud Electric Power Company.....	1189
St. Cloud Water Power and Mill Company.....	424
St. Croix Falls, Wis. <i>See</i> St. Croix River and Lake.	
St. Croix Falls Minnesota Improvement Co., dam across St. Croix River, Wis. and Minn.....	1033
St. Croix Falls Wisconsin Improvement Co., dam across St. Croix River, Wis. and Minn.....	1033
St. Croix Lake, Wis. and Minn. <i>See</i> St. Croix River and Lake.	
St. Croix River, Me.:	
Examinations and surveys.....	156, 466, 523, 798
Improvement.....	162, 217, 232, 296, 349, 557
Transfer of unexpended balance to Lubec Channel improvement.....	689
St. Croix River and Lake, Wis. and Minn.:	
<i>See also</i> Reservoirs, under Mississippi River.	
Canal from Lake Superior to Mississippi River, via, examinations and surveys.....	703, 897
Examinations and surveys.....	235, 897, 1129
Hudson Harbor, Wis., examinations and surveys.....	469, 596

St. Croix River and Lake, Wis. and Minn.—Continued.	Page.
Improvement.....	274, 290,
318, 348, 375, 409, 455, 508, 574, 635, 702, 779, 878, 993, 1111, 1258	
Piers and cribs for protection of mills and rafts against damage by floods and ice, construction of.....	220, 357
Reservoirs at headwaters, examinations and surveys.....	263, 280, 294
Reservoirs at headwaters, railroads granted right of way, through flowage lands, etc.....	251, 532, 536
Reservoirs at headwaters, restoration to public domain, subject to rights of flowage, etc., of lands heretofore withdrawn from market.....	544, 1076
Stillwater Harbor, Minn., improvement.....	779
Water-power dam at St. Croix Falls, Wis.....	1033
St. Francis River, Mo. and Ark.:	
Acquisition of, Cut-off Canal from Dunklin County Transportation Co.....	578
Examinations and surveys.....	62,
79, 186, 209, 325, 326, 467, 716, 774, 797, 898, 1125	
In Arkansas, improvement.....	194, 214, 269, 295, 315, 320,
345, 373, 407, 452, 504, 570, 601, 632, 698, 774, 873, 986, 1101, 1246	
In Missouri, improvement.....	513, 578, 705, 1001
In Missouri, improvement discontinued.....	1123, 1124
Prevention of break from Mississippi River at Walnut bend. <i>See</i> Walnut bend, under Mississippi River.	
Ste. Genevieve, Mo. <i>See</i> Mississippi River.	
St. George (Georges) River, Me. <i>See</i> Georges River.	
St. George Sound, Fla.:	
<i>See also</i> Carrabelle Harbor.	
Examination and survey.....	1126
St. Helens bar, Columbia River, Ore. <i>See</i> Columbia River.	
St. Jeromes Bay and Creek, Md.:	
Examination and survey.....	589
Improvement.....	351, 362, 403
St. Joe (St. Josephs) River, Idaho, examination and survey.....	423
St. John Bayou, La.:	
Carondelet Canal, survey and improvement.....	20
Channel in Lake Pontchartrain to West End and Milneburg, examination and survey.....	1274
Examination and survey.....	521
Route to Ship Island, Miss., via Lake Pontchartrain and the Rigolets, examination and survey.....	186
St. John River, Me. and N. B.:	
Examination and survey at Big rapids.....	465
Investigation by international Commission of conditions and uses of.....	1179
St. John River Commission.....	1179
St. Johns River, Fla.:	
<i>See also</i> Florida State, canal across.	
George Lake to Lake Monroe, examinations and surveys.....	281, 385
George Lake to Lake Monroe, improvement.....	405
Jacksonville Harbor, examination and survey.....	1126
Jacksonville Harbor, improvement.....	1237
Jacksonville to the ocean, examinations and surveys.....	196, 280, 721
Jacksonville to the ocean, improvement.....	124,
183, 195, 205, 215, 230, 268, 323, 343, 371, 405, 450, 501, 566, 629	
668, 669, 771, 869, 926, 981, 1039, 1059, 1094, 1135, 1204, 1237	
Jacksonville to Palatka. <i>See</i> Orange Mills flats, <i>infra</i> .	
Jacksonville to Sanford, examinations and surveys.....	587, 1273
Monroe Lake, entrance and exit, examination and survey.....	385
Monroe Lake, through river and connecting lakes, to head of steamboat navigation, examination and survey.....	587
Mouth, above, improvement.....	371
Orange Mills flats, examination and survey.....	587
Orange Mills flats, improvement.....	869, 981, 1094, 1237
Orange Mills flats, and channel to and above Sanford, examination and survey.....	715
Palatka, Orange Mills flats. <i>See</i> Orange Mills flats, <i>supra</i> .	
Sanford to Lake Harney, examination and survey.....	1273

St. Johns River, Fla.—Continued.	Page.
South Jacksonville Harbor, examination and survey-----	1126
Volusia bar, examination and survey-----	281
Volusia bar, improvement-----	323,
343, 371, 405, 450, 501, 566, 630, 695, 771, 869, 980, 1094, 1237	
Volusia bar to Lake Monroe, improvement-----	980
Water hyacinths, removal of. <i>See</i> Water hyacinths.	
Waterway to Charlotte Harbor or Peace Creek, examination and survey-----	328
Waterway to Fernandina, examination and survey-----	235
Waterway to Fernandina, improvement-----	287, 314
Waterway to Gulf of Mexico, surveys-----	30, 54, 124, 328
Waterway to Jupiter Inlet and Lake Worth, examination and survey-----	418
Waterway to Nassau Inlet or Sound, improvement-----	230
Waterway to St. Marys Harbor, Ga., improvement-- 44, 53, 64, 72, 75, 81, 86	
Waterway to St. Marys River, Ga., surveys-----	30, 54, 124
Waterway to Vassasousa (Waccasassa) Bay, surveys-----	30, 54, 124
St. Johns River, Me. <i>See</i> St. John River.	
St. Jones River, or Creek, Del.:	
Connection, near Dover, with Little River by canal, etc., examination and survey-----	1126
Examinations and surveys-----	328, 643, 793, 894, 1273
Improvement-----	351, 404, 446, 496, 691, 926, 1230
Improvement at mouth under allotment from appropriation for Murderkill River-----	691
St. Joseph Harbor, Mo. <i>See</i> Missouri River.	
St. Joseph Harbor and River, Mich. and Ind.:	
Benton Harbor Canal (or channel), examination and survey-----	299
Benton Harbor Canal (or channel), improvement-----	310,
337, 365, 491, 554, 619, 730, 756	
Benton Harbor Canal (or channel), use of wing dam by Cincinnati, Wabash and Michigan R. R-----	619
Harbor improvement-----	79,
84, 99, 101, 121, 145, 154, 161, 182, 191, 203, 228, 243, 258, 272, 293,	
310, 337, 365, 400, 442, 491, 554, 619, 686, 730, 756, 857, 930, 942, 1107	
Harbor and river, improvement-----	966, 1251
River, dam of Herman L. Hartenstein at Mottville, Mich-----	1287
River, dam of Berrien Springs Power and Electric Co. at Berrien Springs, Mich-----	1147
River, examination and survey-----	299
River, improvement-----	508, 573, 702, 778
St. Josephs Bay, Fla., examinations and surveys-----	464, 1273
St. Josephs (St. Joe) River, Idaho, examination and survey-----	423
St. Lawrence Power Company, canal from St. Lawrence River to Grass River-----	975
St. Lawrence River, N. Y.:	
Alexandria Bay Harbor. <i>See</i> Alexandria Bay Harbor.	
Cape Vincent Harbor. <i>See</i> Cape Vincent Harbor.	
Clayton Harbor. <i>See</i> Clayton Harbor.	
Dam from Les Galops Island to Adams Island-----	1022
Improvement-----	559, 624, 690, 764, 863
Long Sault Island, examination and survey-----	916
Long Sault Island, improvement-----	974
Long Sault Island, improvement discontinued-----	1123, 1124
Morristown Harbor. <i>See</i> Morristown Harbor.	
Ogdensburg Harbor. <i>See</i> Ogdensburg Harbor.	
St. Lawrence Power Co.'s canal to Grass River-----	975
Sister Islands to Crossover light, examination and survey-----	524
Thousand Island Park. <i>See</i> Thousand Island Park.	
Uses, levels, etc., of waters of Great Lakes, including. <i>See</i> International Waterways Commission, under Northern and Northwestern Lakes.	
Waddington, canal around rapids, examination and survey-----	244
Waddington Harbor. <i>See</i> Waddington Harbor.	
St. Leonard Creek, Md., examination and survey-----	589
St. Louis Bay, Minn. and Wis. <i>See</i> Duluth-Superior Harbor.	

St. Louis Harbor, Mo. <i>See</i> Mississippi River.	Page.
St. Louis, Iron Mountain and Southern Railway Company, right of way at Lock No. 1, White River, Ark.-----	1238
St. Louis River, Minn.:	
<i>See also</i> Duluth-Superior Harbor.	
Foot of the first falls, up to, examination and survey-----	421
Foot of the rapids to New Duluth, examination and survey-----	1016
Grassy Point to Fond du Lac, examination and survey-----	591
St. Lucia Inlet and River, Fla.:	
Inlet, examination and survey-----	1273
Inlet and river, examinations and surveys-----	715,797
St. Marks Harbor and River, Fla.:	
Examination and survey-----	44
Harbor, improvement-----	48
Improvement-----	53, 57, 59, 64, 67
River, examinations and surveys-----	196, 387, 519, 1273 ^a
River, improvement-----	103
St. Marys Bayou, Tex. <i>See</i> Matagorda Bay.	
St. Marys Falls Canal, Mich. <i>See</i> St. Marys River.	
St. Marys Harbor and River, Ga. and Fla.:	
Canal to Apalachicola River and Bay, surveys-----	30, 54, 124
Canal to Gulf of Mexico, examinations and surveys-----	30, 54, 124, 280
Canal to Vassasousa (Waccasassa) Bay, via St. Johns River, surveys-----	30, 54, 124
Inland passage to St. Johns River, survey-----	30, 54, 124
Inland passage to St. Johns River, improvement-----	44, 53, 64, 72, 75, 81, 86
St. Marys River, Mich.:	
<i>See also</i> Northern and Northwestern Lakes.	
Acquisition of land for construction of new lock and canal-----	1253
Acquisition by U. S. of canal from State of Michigan-----	319
Anchorage grounds, establishment of-----	1151
Claim of U. S. against State of Michigan in re construction, etc., of canal, settlement of-----	1158
Diversion of water by Michigan Lake Superior Power Co., acquisition of lands by U. S. for-----	1256
Diversion of water by Michigan Lake Superior Power Co., subject to regulations of an international Commission-----	991, 992 ^a
Diversion of water, etc., in vicinity of new canal, permits for-----	1256
Dry dock, examination and survey-----	420
Dry dock, old lock to be converted into; uses of dry dock defined--	377
Examinations and surveys-----	292, 300
Grant to State of Michigan of lands, including right of way, for construction of canal-----	117
Hay Lake and Neebish channels, improvement-- 380, 408, 454, 507, 573, 609, 656, 667, 669, 725, 877, 929, 991, 1026, 1041, 1109, 1136, 1201, 1292	
Huron Lake to Lake Superior, including Hay Lake, Neebish channel, Mud Lake, and, surveys-----	126, 877
Improvement, including canal, diversion of funds to Lake George channel-----	921, 993
Improvement, including canal, diversion of funds to Sailors Encampment, International Waterways Commission, and St. Clair Flats Canal, etc-----	992, 993, 1008
Improvement, including canals and dry dock at falls-----	117, 132, 138, 145, 153, 161, 176, 177, 182, 188, 191, 203, 212, 228, 237, 259, 272, 292, 319, 348, 377, 454, 507 ^a , 573, 609, 668, 669, 725, 732, 805, 992, 993, 1109, 1204, 1253, 1254, 1255, 1256, 1293
Lease of canal lands to State board of fish commissioners; other occupants to vacate-----	395
Permanent indefinite appropriation for operating and care of canal.	319, 346
Regulations for use and administration of canal-----	416, 533
Ship channel in waters connecting Great Lakes between Chicago, Duluth, and Buffalo. <i>See</i> Northern and Northwestern Lakes.	
Suit in ejectment against canal superintendent, relative to ownership of land, payment of cost-----	818
Uses, levels, etc., of waters of Great Lakes, including. <i>See</i> International Waterways Commission, under Northern and Northwestern Lakes.	

	Page.
St. Marys River, Ohio and Ind., examinations and surveys-----	210, 328
St. Michael Canal, Alaska :	
Examination and survey-----	1133
Improvement-----	1268
St. Paul, Minn. <i>See</i> Mississippi River.	
St. Peter, Minn. <i>See</i> Minnesota River.	
St. Petersburg Harbor, Fla., examination and survey-----	1126
St. Peters (Minnesota) River, Minn. :	
<i>See also</i> Minnesota River.	
To be known and designated as Minnesota River-----	117
St. Pierre River, S. C. <i>See</i> Edisto River.	
St. Tammany Water Works Company-----	359
Sakonnet Harbor and River, R. I. :	
Harbor, examination and survey for removal of rocks-----	918
Harbor, examinations and surveys of Churches (Fishing Place)	
Cove, Little Compton-----	37, 527, 719, 802
Harbor, improvement of Churches (Fishing Place) Cove, Little	
Compton-----	76, 87, 846, 1223
River, examination (widening and deepening passage through Tiv-	
erton bridge)-----	719
River, improvement (widening and deepening passage through Tiv-	
erton bridge)-----	763, 862
Sakonnet Point Harbor, R. I. <i>See</i> Sakonnet Harbor and River.	
Sakonnet River, R. I. <i>See</i> Sakonnet Harbor and River.	
Sale and Murphy Canal, La., closure of outlet from Red River. <i>See</i>	
Red River.	
Salem Harbor, Mass. :	
Examinations and surveys-----	210, 420, 521, 590, 678, 1015
Improvement-----	218, 232, 547, 613, 678, 1081
Salem Harbor, Oreg. <i>See</i> Willamette River.	
Salem River, N. J. :	
Examinations and surveys-----	185, 278, 352, 421, 718, 800
Improvement-----	191, 274, 312, 350, 367, 625, 690, 1229
Sales :	
Moneys received from various sources, and not paid into Treasury,	
annual statement regarding-----	1205
Of land or other property when not needed-----	1008
Saline Creek, Ark. (tributary of Little River), examination and survey--	384
Saline River, Ark. (tributary of Ouachita River) :	
Examinations and surveys-----	278, 463, 643, 1272
Improvement-----	321, 345, 373, 407
Salisbury, Md. <i>See</i> Wicomico River (on the eastern shore).	
Salkahatchie River, S. C. :	
Combahee (lower portion of the Salkahatchie) River, examination	
and survey of break from Bull River-----	526
Examination and survey-----	325
Improvement-----	380, 404, 448, 500, 565
Salmon Bay, Wash. :	
<i>See also</i> Waterway to Lake Washington, etc., under Puget Sound.	
Improvement (under Puget Sound-Lake Washington waterway)---	708
	733, 790, 972, 1117
Salmon Creek, or River (Pultneyville), N. Y. <i>See</i> Pultneyville Harbor.	
Salmon Falls River (Berwick Branch of the Piscataqua), Me. and	
N. H. <i>See</i> Berwick Branch.	
Salmon River, Conn., improvement (sometimes under Connecticut	
River)-----	276, 367, 974
Salmon (or Salmon Falls) River (Berwick Branch of the Piscataqua),	
Me. and N. H. <i>See</i> Berwick Branch.	
Salmon River, Mexico Bay (Port Ontario), N. Y. :	
Examinations and surveys-----	186, 422, 524
Improvement-----	77, 80, 85, 100
Salmon River, or Creek (Pultneyville), N. Y. <i>See</i> Pultneyville Harbor.	
Salmon River (tributary of the St. Lawrence), N. Y. :	
At and below Fort Covington, examination and survey-----	422
Fort Covington to the international line, examination and survey--	524

Salt Pond, Falmouth, Mass. <i>See</i> Falmouth Harbor.	Page.
Salt Pond, Harwich, Mass., examination and survey-----	794
Salt (Great) Pond, R. I. <i>See</i> Block Island.	
Salt River, Ky.:	
Examinations and surveys-----	465, 1014
Laying of conduit pipes across-----	529
Saluda River, S. C., examinations and surveys-----	526, 1278
Samamish Lake, Wash., waterway to Puget Sound. <i>See</i> Puget Sound.	
Sampit River, S. C.:	
<i>See also</i> Georgetown Harbor.	
Examinations and surveys-----	899, 1020
San Antonio Bay, Tex.:	
Channel from Aransas Pass to Guadalupe River. <i>See</i> Aransas Bay, Harbor, and Pass.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
San Antonio Creek, Cal. <i>See</i> Oakland Harbor.	
San Antonio River, Tex., survey-----	123
San Bernard River, Tex., examination and survey-----	900
San Buenaventura Harbor, Cal., examinations and surveys-----	279, 519
San Carlos Bay, Fla.:	
Examination and survey-----	464
Puntarasa Harbor, and inside route thence to Charlotte Harbor (Pine Island Harbor, or Sound). <i>See</i> Puntarasa Harbor.	
Sand. <i>See</i> Deposits and Excavations.	
Sandbeach (Harbor Beach), Mich. <i>See</i> Harbor Beach.	
San Diego Harbor and River, Cal.:	
Examinations and surveys-----	209, 444, 1272
Improvement-----	124, 242, 295, 493, 555, 622, 688, 759, 860, 970, 1039, 1115, 1264
Sand Island, Ilwaco Harbor, Columbia River, Wash. <i>See</i> Ilwaco Harbor, under Columbia River.	
Sand Island, Ohio River, Ky. <i>See</i> Ohio River.	
Sandusky Harbor and River, Ohio:	
Dredge boat for harbors on Lake Erie (<i>see also</i> Erie Lake)-----	965, 966
Harbor, examinations and surveys-----	34, 293, 309, 468, 685, 755, 917
Harbor, improvement-----	101,
122, 145, 153, 182, 203, 213, 228, 238, 265, 273, 293, 309, 335, 364,	
399, 411, 490, 553, 618, 685, 755, 855, 965, 1104, 1204, 1248, 1293	
River, examinations and surveys-----	155, 325, 1018
River, improvement-----	161, 203, 316, 346, 374, 573, 634
Sandwich Harbor, Mass., examination and survey-----	897
Sandwich (Hawaiian) Islands. <i>See</i> Hilo, Honolulu, and Pearl harbors.	
Sandy Bay, Cape Ann, Mass.:	
Harbor of refuge, examinations and surveys-----	385, 386, 396, 845, 896, 950
Harbor of refuge, improvement-----	396,
436, 485, 547, 612, 678, 745, 845, 950, 1081, 1204, 1220	
Rockport Harbor, examinations and surveys-----	47, 896
Rockport Harbor, improvement-----	76, 80, 86, 106, 113, 950
Sandy Creek, N. Y. <i>See</i> Big Sandy Creek.	
Sandy Creek, Pa., control of flood waters by Lake Erie and Ohio River Ship Canal Co.-----	1209
Sandy Hook, N. J. <i>See</i> New York Bay and Harbor.	
Sandy Hook Bay, N. J., examination and survey at Atlantic Highlands-----	1130
Sandy Lake, Minn., reservoir. <i>See</i> Reservoirs, under Mississippi River.	
San Francisco Bay and Harbor, Cal.:	
Arch and Shag rocks, improvement-----	860, 930, 971
Belvedere Harbor. <i>See</i> Belvedere Harbor.	
Blossom rock, examinations and surveys-----	156, 165
Blossom rock, improvement-----	171, 175, 176, 177, 971, 1037
Blossom, Noonday, Mile, Sunken, Anita, Arch, Shag, Two Mission, Invincible, Whiting, and Fifteen-foot rocks, examinations-----	714
Blossom, Shag, Arch, Two Mission, and Anita rocks, examinations and surveys-----	797
Examination and survey of San Joaquin River and Stockton Channel from Stockton to San Francisco Bay-----	1272
Golden Gate, examination and survey-----	643
Golden Gate to Carquinez Strait. <i>See</i> San Pablo Bay.	

	Page.
San Francisco Bay and Harbor, Cal.—Continued.	
Harbor, examination and survey (locality not otherwise defined)....	444
Harbor, improvement.....	233, 655, 671
Harbor of refuge between Strait of Juan de Fuca and. <i>See</i> Port Orford Harbor.	
Islais Creek. <i>See</i> Islais Creek.	
Mission Bay, Packard, Whiting, Invincible, Noonday, Anita, and Fifteen-foot rocks; also Centissima and Sears rock and two other rocks near Mail Dock in Bonita channel, examinations and surveys.....	1272
Oakland Harbor. <i>See</i> Oakland Harbor.	
Rincon rock, examination and survey.....	156
Rincon rock, improvement.....	208
South San Francisco Harbor. <i>See</i> South San Francisco Harbor.	
Sangamon River, Ill., examination and survey.....	384
Sanitary District of Chicago, Ill.:	
Connection of drainage canal with Des Plaines River for route to Mississippi River.....	914, 995, 1261, 1262
Lowering of height of Lagrange and Kampsville dams, Illinois River.....	1049
San Jacinto River, Tex. <i>See</i> Waterway to Houston, under Galveston Bay and Harbor.	
San Joaquin River, Cal.:	
Antioch to Carquinez Strait, through Suisun Bay, examinations and surveys.....	913
Examination and survey from San Francisco Bay to Stockton, on Stockton Channel.....	1272
Examination and survey, including tributaries, with a view to improvement in conjunction with State of California.....	1116
Hills Ferry to Firebaugh Ferry, including closure of sloughs above Stockton, examination and survey.....	643
Improvement.....	258, 321, 348, 378, 410, 458, 514, 579, 640, 705, 788, 833, 882, 1001, 1116, 1265
Mormon Channel, or Slough, improvement, including canal to Calaveras River.....	348
378, 410, 458, 705, 788, 833, 882, 883, 1001, 1041, 1059, 1136, 1265	
Mouth, examination and survey.....	444
Old River, examinations and surveys.....	643, 721
Protection, etc., of, and tributaries from injury from mining debris. <i>See</i> California Débris Commission and California State.	
Receipt and use by United States of State dredge, etc., for river and harbor improvements.....	882
Stanislaus River, above mouth of, examinations and surveys.....	714, 913
Stockton, below, examination and survey.....	234
Stockton Channel, or Slough, improvement.....	410, 458, 640, 705, 706, 788, 833, 882, 883, 1001, 1041, 1059, 1136, 1265
San Juan Harbor, P. R.:	
<i>See also</i> Porto Rico.	
Examination and survey.....	1133
Improvement.....	1269
San Leandro Bay, Cal. <i>See</i> Oakland Harbor.	
San Luis d'Apra Harbor, Guam Island, survey.....	924
San Luis Obispo Harbor, Cal.:	
Examinations and surveys.....	278, 352, 444
Improvement.....	493, 555, 622, 688, 760, 860, 971, 1115, 1264
San Mateo River, Cal., examination and survey.....	418
San Pablo Bay, Cal.:	
Channel between Carquinez Strait and Golden Gate, off Points Pinole and Wilson and Lone Tree Point, examination and survey.....	893
Channel between Carquinez Strait and Golden Gate, off Points Pinole and Wilson and Lone Tree Point, improvement.....	971, 1039, 1200
Dredge for tributary rivers.....	409, 410, 457
Examination and survey.....	444
Examination and survey of San Joaquin River and Stockton Channel from Stockton to San Francisco Bay.....	1272

San Pedro Bay and Harbor, Cal. <i>See</i> Wilmington Harbor.	Page.
San Rafael Creek, or River, Cal., examinations and surveys-----	586, 714, 1125
San Simeon Bay, Cal., examinations and surveys-----	519, 586
Santa Ana River, Cal. <i>See</i> Newport Harbor.	
Santa Barbara Channel and Harbor, Cal.:	
<i>See also</i> Estero Bay.	
Examinations and surveys-----	234, 279
Santa Cruz Bay and Harbor, Cal., examinations and surveys--	195, 219, 586, 1012
Santa Monica Bay and Harbor, Cal.:	
Bay, examination and survey-----	385
Deep-water harbor, etc., examinations and surveys----	622, 759, 806, 810, 811
Deep-water harbor, etc., improvement-----	759
Deep-water harbor between points Dume and Capistrano, exam- ination and survey-----	555
Harbor, examination and survey-----	366
Santa Rosa Sound, Fla., bar at junction with Choctawhatchee Bay, examination-----	643
Santee Canal, S. C., examination and survey-----	325
Santee River, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Canal to Cooper River. <i>See</i> Santee Canal.	
Examination and survey-----	300
Improvement, including Estherville-Minim Creek and Mosquito Creek canals---	350, 371, 404, 448, 500, 565, 628, 694, 770, 867, 979, 1091, 1234
Waterway from, and to and opposite McClellanville, to Bulls Bay and Charleston, via Alligator Creek and Wando and Owendaw rivers. <i>See</i> Charleston Harbor.	
Santiam River, Oreg., examination-----	796
Sapelo Sound, Ga.:	
Waterway from Doboy to Sapelo, examination and survey-----	587
Waterway from Savannah, Ga., to Fernandina, Fla., via. <i>See</i> Savannah Harbor and River.	
Saranac River, N. Y. <i>See</i> Plattsburg Harbor.	
Sarasota Bay, Fla.:	
Examination and survey-----	519
Improvement-----	567, 630, 695, 771, 869, 961, 1093, 1237
Route to Lemon Bay, examination and survey-----	894
Sasanoa River (The Gut, opposite Bath, etc.), Me.:	
Examinations and surveys-----	165, 722
Improvement-----	184, 194, 271, 307, 338, 762, 1220
Sassafras River, Md., examinations and surveys-----	420, 521
Sassafras route, Chesapeake and Delaware Canal. <i>See</i> Chesapeake and Delaware Canal.	
Saugatuck Harbor, Conn. <i>See</i> Westport Harbor.	
Saugatuck Harbor, Kalamazoo River, Mich.:	
<i>See also</i> Kalamazoo River.	
Examinations and surveys-----	165, 522, 730
Improvement-----	171, 175, 176, 177, 182, 191, 203, 212, 228, 237, 258, 272, 292, 310, 337, 365, 400, 442, 491, 620, 686, 757, 778, 858, 878, 926, 967, 1039, 1107, 1251
Maintenance of depth sufficient to accommodate dredge <i>Gillespie</i> -----	1251, 1252
Saugatuck River, Conn. <i>See</i> Westport Harbor.	
Saugerties Harbor, N. Y.:	
Examinations and surveys-----	386, 898
Extension of improvement upstream by private parties, etc., per- mitted; U. S. funds not to be used therefor-----	1085
Improvement-----	397, 437, 487, 549, 614, 681, 749, 848, 954, 1085, 1225
Saugus River, Mass.:	
<i>See also</i> Lynn Harbor.	
Examinations and surveys-----	645, 1128
Sauk Rapids (falls and village), Minn. <i>See</i> Mississippi River.	
Sauk Rapids Manufacturing Company, dam of-----	1069
Sauk Rapids Water Power Company, dam of-----	1042, 1219
Sauk River, Wis. <i>See</i> Port Washington Harbor.	
Sault Ste. Marie Canal, Mich. <i>See</i> St. Marys River.	
Sausal Creek, Cal. <i>See</i> Oakland Harbor.	

Savannah Harbor and River, Ga. and S. C. :	Page.
Andersonville shoals, dam of J. R. Earle Development Co.....	1286
Augusta, Ga., above, examinations and surveys.....	278, 520
Augusta, Ga., above, improvement. 323, 343, 371, 629, 695, 770, 868, 1092, 1235	
Augusta, Ga., to Andersonville, S. C., examination and survey.....	520
Augusta, Ga., to Savannah, examinations and surveys.....	124, 326, 1273
Augusta, Ga., to Savannah, improvement.....	349,
371, 405, 449, 501, 566, 629, 695, 770, 868, 930, 942, 1026, 1092, 1235	
Calhoun Falls, dam of Hugh MacRae Co.....	1285
Cherokee shoals, dam of Hugh MacRae Co.....	1287
Dortons Creek, S. C., at, dams of Twin City Power Co.....	933, 1217
Gregg shoals, dam of Savannah River Power Co.....	1213
Harbor, examinations and surveys.....	196, 210, 353, 464, 526, 682, 914, 1126
Harbor, improvement.....	33, 51,
61, 62, 65, 67, 71, 87, 119, 129, 134, 205, 215, 222, 230,	
240, 257, 268, 287, 308, 335, 363, 398, 439, 489, 551,	
616, 668, 669, 682, 726, 732, 751, 809, 828, 840, 851,	
926, 958, 1038, 1058, 1092, 1135, 1204, 1235, 1293	
Hattons Ford, dam of Hugh MacRae Co.....	1286
McDaniel shoals, dam of Anderson Guaranty and Trust Co.....	1284
Middleton shoals, dam of Anderson Guaranty and Trust Co.....	1285
Prices Island, S. C., dams of Twin City Power Co.....	933, 1217
Spirit Island, Ga., to Charleston and Savannah Rwy. crossing, ex-	
aminations and surveys.....	643, 722
Tonnage duties, etc.....	15, 16 ¹ , 17, 20 ³ , 24
Trotters shoals, dam of Hugh MacRae Co.....	1287
Turner shoals, dam of Anderson Guaranty and Trust Co.....	1285
Waterway to Beaufort, S. C., examination and survey.....	723
Waterway to Beaufort, S. C., improvement (under Savannah Har-	
bor).....	752, 851
Waterway to Fernandina, Fla., examinations and surveys (<i>see also</i>	
waterway from Doboy to Sapelo, under Doboy Sound).....	587, 1236
Waterway to Fernandina, Fla., improvement... 629, 695, 771, 980, 1092, 1236	
Waterway to Tennessee River, via Hiwassee River, examination	
and survey.....	326
Savannah River Power Company, dam of.....	1213
Sawdust, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Sawyers bend, Mississippi River. <i>See</i> St. Louis Harbor, under Missis-	
issippi River.	
Saxton, Minn., examination and survey.....	897
Saybrook Harbor, Conn. :	
<i>See also</i> Connecticut River.	
Improvement.....	77, 89, 98, 207
Sayville, N. Y. <i>See</i> Browns Creek.	
Scajacuada Creek, N. Y. <i>See</i> Buffalo Harbor.	
Scappoose Bay and Creek, Oreg., examination.....	796
Schodack Creek, N. Y., improvement at mouth (under Hudson River) ..	1227
Schuylkill River, Pa. :	
Construction of bulkhead at Philadelphia by the Schuylkill River	
East Side R. R.....	429
Examination and survey.....	802
Improvement.....	182, 192, 206, 216, 231,
241, 258, 277, 286, 312, 340, 368, 402, 446, 495, 560, 625, 691, 765	
Schuylkill River East Side Railroad Company.....	429
Schwartztrawber, Philip, relief of.....	108
Scioto River, Ohio, examination and survey.....	422
Scituate Harbor, Mass. :	
Harbor of refuge, examination and survey.....	279
Improvement.....	320, 350, 360, 396, 436, 484, 546, 613, 678, 745, 845
North River and, examination and survey.....	120
North River, mouth, examinations and surveys.....	47, 590
Scotland (steamship), removal of wreck of.....	159, 166, 168, 171
Scott Point, Tennessee River, Tenn. <i>See</i> Tennessee River.	
Scranton, Gilmore G., suit of.....	818

	Page.
Scuppernong River, N. C.:	
Examinations and surveys	718, 917
Improvement	275, 294, 313, 342, 404, 978, 1090, 1233
Seaboard, transportation routes to. <i>See</i> Canals and Transportation routes.	
Seabright, N. J., to Deal, examination and survey for breakwater to protect harbor, etc., at Long Branch	387
Seaconnet Harbor and River, R. I. <i>See</i> Sakonnet Harbor and River.	
Seaford, Del. <i>See</i> Nanticoke River.	
Seaford Creek, N. Y., examination and survey	646
Sea Lion (dredge), documenting of, as a vessel of the U. S.	1163
Seattle and Lake Washington Waterway Company (under Puget Sound-Lake Washington waterway)	972
Seattle Canal, Wash. <i>See</i> Waterway to Lake Union, etc., under Puget Sound.	
Sea walls. <i>See</i> Structures.	
Sebastian Inlet, Indian River, Fla., examinations and surveys	1094, 1126
Sebewaing Harbor and River, Mich.:	
Examinations and surveys	219, 235, 299, 386, 590, 646, 722
Improvement	242, 323, 778, 878, 1109, 1253
Secretary Creek (Warwick River), Md. <i>See</i> Warwick River.	
Secretary of War. <i>See</i> Appropriations, Bridges, Contracts, Estimates, Land, Navigable waters, Regulations, Reports, Rivers and harbors, and other general subjects.	
Security. <i>See</i> Bonds.	
Sedro Woolley, Wash. <i>See</i> Skagit River.	
Seekonk (Pawtucket) River, R. I. <i>See</i> Pawtucket River.	
Selkirk Harbor, N. Y. <i>See</i> Salmon River, Mexico Bay.	
Semiamoo Bay, Wash. <i>See</i> Blaine Harbor.	
Senate, U. S. <i>See</i> Congress and Documents.	
Sequatchie River, Tenn., examination and survey	648
Service, voluntary or personal, acceptance of, forbidden, except in certain emergencies	394
Severn River, Md. <i>See</i> Annapolis Harbor.	
Seward, Emory R., payments to:	
For work in Hudson River, N. Y.	231
For work in New Rochelle Harbor, N. Y.	480
Shallotte River, N. C.:	
Examinations and surveys	525, 1131
Improvement	1234
Shallow Bag Bay, N. C., examination and survey	1277
Shark River, N. J.:	
Examinations and surveys	326, 593
Inlet at mouth, examination for harbor of refuge	718
Shawneetown Harbor, Ill. <i>See</i> Ohio River.	
Shaws Cove, Thames River, Conn. <i>See</i> New London Harbor.	
Shears, the, Delaware Bay, Del. <i>See</i> Delaware Breakwater Harbor and Harbor of refuge in bay, under Delaware Bay and River.	
Sheboygan Harbor and River, Wis.:	
Effect of wave action, with plans for overcoming same	826, 1108
Examinations and surveys	186, 803, 826, 1108
Improvement	121, 130, 145
154, 162, 176, 177, 181, 190, 202, 212, 227, 237, 258, 271, 292, 311, 338, 366, 401, 443, 492, 555, 621, 687, 758, 859, 930, 969, 1110, 1257	
Payment to C. Reiss Coal Co. for dredging work	687
Payment to Sheboygan Tug Boat Line for damages to tug <i>Sheboygan</i>	834
Sheboygan Tug Boat Line, payment to	834
Sheepscot River, Me. <i>See</i> Hendricks Harbor.	
Sheepshead Bay, N. Y.:	
Examinations and surveys	278, 1018
Improvement	315, 350, 361, 397, 437, 485
Shellfish:	
Fishing or dredging for, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Prohibition against depositing of refuse, etc., matter upon lands used for cultivation of oysters	1122, 1123

	Page.
Shelter Cove, Cal., examination and survey-----	519
Shem River, S. C., examination and survey-----	1279
Shenandoah River, Va. and W. Va.:	
Examination and survey-----	298
Improvement-----	322, 336
Location of right of way of Winchester and Potomac R. R. at Harpers Ferry not to injure canalization of-----	65
Shenango River, Pa., canal via (Lake Erie and Ohio River Ship Canal) -	1207
Shenenne (Cheyenne) River, S. Dak. <i>See</i> Cheyenne River.	
Shiawassee River, Mich.:	
Diversion to Saginaw River of unexpended balance of appropria- tion for improvement-----	1109
Examinations and surveys-----	716, 778
Improvement (under Saginaw River)-----	991
Shilshole Bay, Wash., waterway from Puget Sound to Lake Union, etc., via. <i>See</i> Puget Sound.	
Ship Island Harbor and Pass, Miss.:	
Channel to Biloxi, examination and survey-----	1017
Channel, etc., to Gulfport, application to dredge boat for Missis- sippi coast of improvement funds for-----	1240
Channel, etc., to Gulfport, examinations and surveys with view to improvement-----	522, 795, 1129
Channel, etc., to Gulfport, improvement and maintenance under contract, etc-----	852, 1026, 1058, 1177, 1240, 1291
Channel, etc., to Gulfport, payments to Spencer S. Bullis and annul- ment of contract-----	1177, 1240
Channel, etc., to Gulfport, surveys to determine work done by con- tractor-----	852
Channel, etc., to Gulfport, wharfage, etc., charges to be approved by Secretary of War-----	1177, 1178
Channel to Gulfport and to Biloxi, examination and survey-----	827
Channels to mainland (i. e., to Gulfport, Biloxi, mouth of East Pearl, or mouth of Pascagoula), survey-----	799
Pass, examinations and surveys-----	354, 645, 795, 827, 1129
Pass, improvement-----	852, 1240
Route to Bayou St. John, La., via the Rigolets and Lake Pont- chartrain, examination and survey-----	186
Shipman, John J., payment to-----	742
Shipping, levying of duties on. <i>See</i> Tolls.	
Ships. <i>See</i> Tolls, Vessels, and Wrecks.	
Shipyards River, S. C., examination and survey-----	1279
Shoal Harbor, N. J.:	
Examination and survey-----	386
Improvement-----	560, 625, 690, 765, 863, 975, 1087, 1228
Shoalwater (Willapa) Bay, Wash. <i>See</i> Willapa Bay, Harbor, and River.	
Shooters Island, Newark Bay, N. Y. <i>See</i> Staten Island-New Jersey channel.	
Shore lines, cases of improvements by U. S. within, to be reported-----	1011
Shreveport, La.:	
Harbor. <i>See</i> Red River.	
Waterway to Jefferson, Tex., via Cypress Bayou and connecting lakes, etc. <i>See</i> Cypress Bayou.	
Waterway to Fulton, Ark., via Cypress Bayou and connecting lakes, etc., examinations and surveys-----	463, 465
Shreveport Water Works Company-----	934
Shreve's (Henry M.) snag-boat invention, payment of claims for-----	332
Shrewsbury River, N. J.:	
Examinations and surveys-----	123, 186, 243, 1017
Improvement-----	191, 216, 277,
297, 312, 335, 368, 445, 495, 559, 624, 690, 764, 863, 926, 975, 1087, 1228	
Shyenne (Cheyenne) River, S. Dak. <i>See</i> Cheyenne River.	
Signals, fog, light, etc. <i>See</i> Light-houses and Lights.	
Siletz River, Oreg., examination-----	796

Silver Springs Run, Fla.:	Page.
Examination and survey, in connection with Oklawaha River-----	1126
Improvement (under Oklawaha River)-----	1237
Sinepuxent Bay, Md.:	
Inlet into the Atlantic at the Hommacks, examination and survey--	209
Waterway from Chincoteague Bay, Va., to Delaware Bay, via.	
See Chincoteague Bay and Inlet.	
Waterway to Isle of Wight Bay and Indian River, examination	
and survey-----	387
Waterway to Pocomoke River, examinations and surveys-----	646, 722
Sioux City, Iowa. See Missouri River.	
Sioux (Big) River, S. Dak., survey for dam for storage of water in	
Lakes Kampeska and Poinsett-----	918, 920
Sipsey River (tributary of Tombigbee River), Ala., examinations	
and surveys-----	300, 518, 1272
Sites, land. See Land.	
Siuslaw Bay and River, Oreg.:	
Examinations and surveys-----	329, 468, 525, 1004
Improvement-----	579, 641, 707, 789, 861, 1004
Improvement to be discontinued-----	1123, 1124
Sixmile Island, Allegheny River, Pa. See Allegheny River.	
Skagit Bay, Wash. See Swinomish Slough.	
Skagit River, Wash.:	
See also Puget Sound and tributaries.	
Examinations and surveys-----	233, 595, 803, 1280
Improvement-----	320, 379, 410, 458, 515, 580
Skamokawa, Wash. See Columbia River.	
Skamokawa River, Wash., examination and survey-----	595
Skidaway Narrows, Ga.:	
Examinations and surveys-----	914, 1013
Improvement-----	1092, 1198, 1236
Skipanon River, Oreg., examination and survey-----	353
Skipton Creek, Md., examinations and surveys-----	355, 420
Slabs, depositing of, into navigable waters. See Deposits, etc.	
Slack-water systems. See Appropriations, Canals, Dams, Land, Locks,	
Navigable waters, Rivers and harbors, Structures, Tolls, Wrecks, and	
other subjects.	
Slades Creek, N. C. See Pungo River.	
Sladesville, N. C. See Pungo River.	
Slag, depositing of, into navigable waters. See Deposits, etc.	
Slate, depositing of, into navigable waters. See Deposits, etc.	
Slaughter Creek, Del., examination for waterway via-----	643
Slaughter Creek, Md., examination and survey-----	298
Sludge, depositing of, into navigable waters. See Deposits, etc.	
Sluiceways. See Navigable waters and Structures.	
Smith, Edward A., dams of-----	1077, 1217
Smith, Isaac S., relief of-----	128
Smith Island, Delaware River, Pa. See Philadelphia, under Delaware	
Bay and River.	
Smithland Harbor, Ky. See Ohio River.	
Smiths Cove, Wash., waterway from Puget Sound to Lake Union, etc,	
via. See Puget Sound.	
Smiths Creek, Md., examination and survey-----	589
Smiths River, Cal., examination and survey-----	463
Smith, Thomas Rhys, claim of-----	675
Smithtown Harbor, N. Y., examination-----	795
Smith, W. H. (canal boat), payment to owners of-----	834
Smutty Nose Island, Me. See Isles of Shoals.	
Smyrna River, Del.:	
Examinations and surveys-----	280, 464, 913, 1273
Improvement-----	320,
341, 368, 496, 562, 625, 691, 767, 865, 976, 1088, 1230,	
Snake River, Alaska, improvement by Nome Improvement Co.--	1119, 1120, 1268
Snake River, Minn., examination and survey-----	326

Snake River, Oreg., Wash., and Idaho:	Page.
Asotin, Wash., to Pittsburg Landing, Oreg., examination and survey.	899
Examination and survey (limits not defined; under Columbia River) -----	1132
Huntington bridge, Oreg., to Seven Devils mining district, examination and survey -----	588
Improvement -----	258, 274, 294, 319, 348, 378, 410, 458, 514, 579, 641, 706, 707, 788, 883, 1003, 1116, 1260
Improvement, diversion of funds from appropriation for Clearwater River -----	1003
Improvement, use upon, of moneys furnished by State of Oregon or Washington -----	1266
Lewiston, Idaho, to Boise River, examination and survey -----	423
Lewiston, Idaho, to mouth, examination and survey -----	919
Lewiston, Idaho, to Salmon River, examination and survey -----	353
Riparia, Wash., to mouth, examination and survey -----	803
Shoshone Falls to Lewiston, Idaho, examination and survey -----	234
Snohomish River, Wash.:	
See also Everett Harbor and Puget Sound and tributaries.	
Examinations and surveys -----	233, 328, 595, 648, 649, 1021, 1280
Improvement -----	379, 410, 458, 515, 580, 708, 1119
Snoqualmie River, Wash.:	
See also Puget Sound and tributaries.	
Improvement -----	379, 410, 458, 515, 580
Sny Island levee, Mississippi River. See Mississippi River.	
Socastee Creek, or River, S. C., examination and survey -----	526
Soda (or Sodo) Lakes, La.:	
Waterway from Shreveport, La., to Fulton, Ark., via. See Shreveport.	
Waterway from Shreveport, La., to Jefferson, Tex., via. See Cypress Bayou.	
Somers Cove, Little Annemessex, Md. See Crisfield Harbor.	
Somerville, Mass. See Mystic River.	
Sonoma Creek, Cal., examination and survey -----	893
Soo Canal, Mich. See St. Marys River.	
South Amboy, N. J. See Raritan Bay.	
South Atlantic States, removal of water hyacinths. See Water hyacinths.	
South Bar Lake, Leelanaw County, Mich. See Arcadia Harbor.	
South Bass Island, Lake Erie, Ohio. See Erie Lake.	
South Bay, Lake Superior, Mich. See Munising Harbor.	
South Beach, Edgartown Harbor, Mass. See Edgartown Harbor.	
South Bend, Wash. See Willapa Bay, Harbor, and River.	
South Black River, Mich. See South Haven Harbor.	
South Branch, Chicago River, Ill. See Chicago Harbor and River.	
South Branch, Patapsco River, Md. See Baltimore Harbor.	
South Branch, Penobscot River, Me. See Marsh River.	
South Branch, Potomac River, W. Va. See Chesapeake and Ohio Canal and Potomac River.	
South Branch, Shrewsbury River, N. J. See Shrewsbury River.	
South Buffalo, N. Y. See Buffalo Harbor.	
South channel, New York Harbor, N. Y. See New York Bay and Harbor.	
South Chicago Harbor, Ill. See Calumet Harbor and River.	
South Creek, N. C., examination -----	718
South (Ocella) Creek, S. C. See Edisto River.	
Southeast River, Md., examination and survey -----	521
South Edisto River, S. C. See Edisto River.	
Southern Branch, Elizabeth River, Va. See Elizabeth River and Norfolk Harbor.	
Southern Pacific Company, agreements with, relative to deep-water harbor in Santa Monica Bay, Cal. -----	759, 760
South Fork, Bagaduce River, Me. See Bagaduce River.	
South Fork, Cumberland River, Ky. See Cumberland River.	
South Fork, Edisto River, S. C. See Edisto River.	
South Fork, Forked Deer River, Tenn. See Forked Deer River.	

South Fork, Kentucky River, Ky. <i>See</i> Kentucky River.	Page.
South Harpswell, Me., examination and survey of ledge off Potts Point.	1274
South Haven Harbor, Mich.:	
Establishment of dock lines, building of bulkheads without Govern-	
ment expense, and deeding to U. S. of certain land, limitation	
upon expenditure of improvement funds in re-----	1107, 1198, 1251
Examinations and surveys-----	156, 800, 1015
Improvement -----	162,
182, 191, 203, 212, 228, 237, 259, 272, 292, 310, 337, 365, 400,	
442, 491, 554, 620, 686, 756, 858, 926, 966, 1107, 1198, 1251	
South Hero Island, Vt. <i>See</i> North and South Hero islands, under	
Champlain Lake.	
South Jacksonville, Fla. <i>See</i> St. Johns River.	
South Kingston, R. I. <i>See</i> Narrow River and Point Judith Harbor	
and Pond.	
South Mills, N. C., waterways from Norfolk, Va., to North Carolina, by	
way of. <i>See</i> Norfolk Harbor.	
South Milwaukee Harbor, Wis.:	
Examinations and surveys-----	687, 1022
Improvement -----	758
South Norwalk Harbor, Conn. <i>See</i> Norwalk Harbor.	
South Nyack, N. Y. <i>See</i> Hudson River.	
Southold Harbor, N. Y., examinations and surveys-----	387, 646
South Pass, Mississippi River. <i>See</i> Passes and South Pass, under Mis-	
sissippi River.	
Southport Harbor, Mill River, Conn.:	
Examinations and surveys-----	185, 797
Improvement -----	47, 59, 77, 81, 243, 258, 307, 333, 361, 954, 1084, 1224
Southport (Kenosha) Harbor, Wis. <i>See</i> Kenosha Harbor.	
South River, Salem, Mass. <i>See</i> Salem Harbor.	
South River, N. J.:	
Examinations and surveys-----	185, 299, 1130
Improvement -----	191,
216, 312, 340, 368, 445, 495, 559, 624, 690, 764, 863, 975, 1087, 1228	
South River, N. C., examination and survey-----	1277
South San Francisco Harbor, Cal., examination and survey-----	893
South Scituate, Mass. <i>See</i> Scituate Harbor.	
South Sioux City, Iowa. <i>See</i> Sioux City, under Missouri River.	
Southwest Louisiana Rice Growers' Association, locks and dam in	
Bayou Vermilion, La -----	1032
Southwest Pass, Mississippi River. <i>See</i> Passes and Southwest Pass,	
under Mississippi River.	
Spain, control of property and rights acquired from, in Philippine	
Islands -----	1029, 1030
Spanish Fort, La. <i>See</i> Pontchartrain Lake.	
Spanish Lake, La., securing United States against damage claims from	
draining, in improvement of Teche Bayou-----	1241, 1242
Sparkill Creek, or River, N. Y. <i>See</i> Channel to Upper Nyack and	
Piermont, under Hudson River.	
Specific appropriations, permanent. <i>See</i> Appropriations.	
Speed, Bryne &, basin in Louisville and Portland Canal, Ky-----	601
Speed of vessels, etc., regulation of. <i>See</i> Vessels.	
Split Rock Harbor and River, Minn., examination and survey-----	1016
Spokane Indian Reservation, Wash. <i>See</i> Spokane River.	
Spokane River, Idaho and Wash.:	
Examination and survey-----	644
Use of waters of, along Spokane Indian Reservation for power	
purposes-----	1078
Sponge Harbor, Fla. <i>See</i> Anclote Harbor and River.	
Spooner, M. A., dam of-----	1079
Spring Creek, N. Y., examination and survey-----	467
Springdale, Pa. <i>See</i> Allegheny River.	
Spring Garden, Baltimore, Md. <i>See</i> Baltimore Harbor.	
Spring Lake Harbor, Mich. <i>See</i> Grand Haven Harbor.	
Springwells, Mich. <i>See</i> Detroit River.	

	Page.
Spyten Duyvil Creek, N. Y. <i>See</i> Harlem River.	
Squam (Annisquam) Harbor, Mass., examination, survey, and improvement between Gloucester Harbor and.....	25
Squan (Manasquan) River, N. J. <i>See</i> Manasquan River.	
Squash Meadow shoals, Vineyard Sound, Mass., examination for harbor of refuge (under Vineyard Sound).....	953
Stage Harbor, Chatham, Mass. <i>See</i> Chatham Harbor.	
Stamford Harbor, Conn.:	
<i>See also</i> Tomac Harbor.	
Examinations and surveys.....	47, 386, 586
Improvement.....	437, 485, 548, 614, 679, 747, 846, 954, 1084, 1224
Stanford ledge, Portland Harbor, Me. <i>See</i> Portland Harbor.	
Stanislaus River, Cal., examination and survey.....	643
Starr rock, Bellingham Bay, Wash. <i>See</i> Bellingham Bay and Harbor.	
Starve Island reef, Lake Erie, Ohio. <i>See</i> Erie Lake.	
Staten Island, N. Y.:	
<i>See also</i> Lemon Creek and New York Bay and Harbor.	
Breakwater at Princess Bay, examination and survey.....	592
Ice breaker, improvement.....	77
Staten Island-New Jersey channel, N. Y. and N. J.:	
<i>See also</i> New York Bay and Harbor.	
Anchorage grounds in Kill van Kull, Newark Bay, and Arthur Kill, establishment, etc., of.....	480, 1151
Arthur Kill (Staten Island Sound), Pralls Island to north of Piles Creek, examination and survey.....	1129
Arthur Kill (Staten Island Sound), west side of Buckwheat Island, examination and survey.....	1276
Channel in Newark Bay, north of Shooters Island, from Kill van Kull to Corner Stake light, including reef at Bergen Point light, examination and survey.....	1129
Examinations and surveys (Arthur Kill (Staten Island Sound), Newark Bay, and Kill van Kull).....	208, 245, 898
Improvement (Arthur Kill (Staten Island Sound), Newark Bay, and Kill van Kull).....	232, 260, 276, 323, 367, 397, 438, 487 ² , 549 ² , 615 ² , 681 ² , 749, 848, 955 ² , 1038, 1086, 1135, 1200, 1292
Staten Island Sound (Arthur Kill), N. Y. and N. J. <i>See</i> Staten Island-New Jersey channel.	
States of the Union:	
Land, cession of jurisdiction by, to precede expenditure by United States of funds for improvements.....	95, 479
Land, grants to those admitted as, after 1841, for purposes of internal improvement.....	93
Prohibition against depositing of refuse, etc., matter upon lands used for cultivation of oysters within jurisdictional boundaries of.....	1122, 1123
Statistics, commercial. <i>See</i> Commerce.	
Statutes. <i>See</i> Laws and Navigable waters.	
Staunton River, Va.:	
Examinations and surveys.....	279, 353
Improvement.....	295, 313, 341, 369, 403, 447, 497, 563
Steamboat Channel, or Slough, Cal. <i>See</i> Sacramento River.	
Steamboats. <i>See</i> Dredge boats, Tolls, Vessels, and Wrecks.	
Steele Bayou, Miss.:	
Examinations and surveys.....	389, 1275
Improvement.....	406, 451, 502, 568, 631
Steels ledge, Belfast Harbor, Me. <i>See</i> Belfast Bay and Harbor.	
Sterling, Ill. <i>See</i> Rock River.	
Sterling Hydraulic Company, power station, etc., of, in Rock River, Ill.	1260
Stielaguamish (Stilaguamish) River, Wash. <i>See</i> Stilaguamish River.	
Stilaguamish River, Wash.:	
<i>See also</i> Puget Sound and tributaries.	
Examination and survey.....	328
Improvement.....	379, 410, 458, 515, 580
Stiles Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Stillpond Harbor, Md., examination and survey.....	521

Stillwater Harbor, Minn. <i>See</i> St. Croix River and Lake.	Page.
Stilson, Eli, payment to -----	330
Stockbridge Harbor, Wis. <i>See</i> Fox River.	
Stockholm, Wis. <i>See</i> Mississippi River.	
Stockton, Cal. <i>See</i> San Joaquin River.	
Stockton Channel, or Slough, Cal. <i>See</i> San Joaquin River.	
Stone. <i>See</i> Deposits, Materials, and Property.	
Stone Haven Harbor, Wis., examination and survey -----	1022
Stonehouse bar, Hudson River, N. Y. <i>See</i> Hudson River.	
Stonington Harbor, Conn.:	
Examinations and surveys -----	37, 196, 643, 721
Improvement -----	43, 52, 66,
217, 232, 241, 276, 285, 320, 334, 361, 396, 436, 485, 548, 613, 679, 746	
Stono River, S. C., improvement -----	205
Stonybrook Harbor, N. Y., examination and survey -----	386
Stony Creek and Lake, Oceana County, Mich., examination and survey -----	897
Stonycreek Harbor and River, Conn., examination and survey -----	586
Storage reservoirs. <i>See</i> Reservoirs.	
Straight Island, Ohio River. <i>See</i> Ohio River.	
Straight, or Rollingstone, Slough, Mississippi River, Wis. <i>See</i> Rollingstone Slough, under Mississippi River.	
Streams. <i>See</i> Navigable and Nonnavigable waters.	
Stretchs riffle, Snohomish River, Wash. <i>See</i> Snohomish River.	
Structures:	
<i>See also</i> Bridges, Buildings, Dams, Land, Light-houses, Lights, Locks, Property, and other subjects.	
Alaska, Bering Sea, mining for gold, etc. -----	910, 911
Alaska, wharves and piers in, construction of, by railroads -----	825
Causeways, etc., obstructing navigation, cases of those erected or in process of erection, with method of altering to overcome obstruction, to be reported to Congress -----	414, 415, 462
Compensation for displacement of tidewater ---	713, 887 ² , 890, 893, 906 ² , 1010
Damage or danger to property from currents deflected by bridge piers or abutments, provisions of law regarding -----	515
Dams, dikes, and causeways, general provisions of law regarding construction of, to apply to Illinois and Mississippi Canal -----	886, 1009
Dams, private, for power, etc., purposes, special act (June 21, 1906) regulating construction -----	1183
Dams, private, general laws enacted prior to special act of 1906 regulating construction, etc., with reference to preservation, etc., of navigable waters. <i>See</i> the various subheadings under Structures.	
Dams, reservoirs, water plants, ditches, flumes, pipes, tunnels, and canals, rights of way for, in forest reserves -----	1063
Establishment of harbor lines beyond which no piers, wharves, bulkheads, etc., shall extend without permission -----	518,
584, 887 ² , 890, 893, 906 ² , 1010	
Locks, booms, sluices, etc., provision for, in connection with dams constructed by private parties (<i>see also</i> Locks) -----	1184
Missouri River, dikes, etc., of riparian owners for protection of property -----	1000
New Jersey coast, construction by State, etc., authorities of piers, jetties, breakwaters, etc., in connection with river and harbor improvements -----	1206
Philippine Islands, construction of warehouses, wharves, piers, lighthouses, signal and life-saving stations, buoys, etc.; control of property and rights acquired from Spain -----	1029, 1030, 1063, 1064
Plans, sites, etc., of, in navigable waters, examination of, funds applicable for payment of expenses incurred prior to March 3, 1905, when not derived from appropriations for improvement, etc., at the localities affected. <i>See</i> Examinations and surveys.	
Plans, sites, etc., of, in navigable waters, examination of, funds applicable for payment of expenses incurred subsequent to March 3, 1905 -----	1123
Porto Rico, construction, by private parties, of wharves, piers, dolphins, booms, weirs, breakwaters, sea walls, bulkheads, jetties, etc. -----	1171, 1271

Structures—Continued.		Page.
Public, leasing of, authorized.....	602, 655, 728	
Public, use, occupancy, or injury by private parties, cases to be reported annually, etc.....	263, 414, 462, 886	
Public, use, occupancy, or injury by private parties forbidden unless authorized.....	263, 583 ² , 584, 712, 713 ² , 888, 889, 890 ² , 893, 1010	
Public, use, occupancy, or injury by private parties, report as to what legislation is necessary for protection, etc., of.....	263, 386	
Wharves, channels adjacent to, cases to be reported where projects include.....	1011	
Wharves, piers, dolphins, booms, dams, dikes, causeways, weirs, breakwaters, bulkheads, jetties, etc., general provisions of law regarding construction of (<i>see also</i> Dams, <i>supra</i>).....	582, 583, 584, 642, 886 ² , 887 ² , 890, 893, 906, 1010	
Stubbs & Lackey, relief of.....	603	
Stubbs Ferry, Mont. <i>See</i> Missouri River.		
Sturgeon Bay, Mississippi River, Ill. <i>See</i> Mississippi River.		
Sturgeon Bay, Wis. <i>See</i> Sturgeon Bay and Lake Michigan Canal.		
Sturgeon Bay and Lake Michigan Canal, Wis.:		
Bridge across Sturgeon Bay at city of Sturgeon Bay, removal, relocation, or changing of.....	1110	
Canal, acquisition of, by the U. S.....	443, 635	
Canal, examinations and surveys.....	443, 919	
Canal, improvement.....	702, 758, 859	
Canal and harbor of refuge, examination and survey.....	195	
Canal and harbor of refuge, improvement.....	969, 1039, 1110, 1257	
Grant of land to State of Wisconsin for construction of; tolls.....	149, 198	
Harbor of refuge, appropriation not to be expended until private right to charge toll shall have been relinquished.....	311	
Harbor of refuge, improvement.....	214, 227, 271, 292, 311, 338, 366, 401, 443, 555, 621, 687, 758, 859	
Sturgeon Bay and Lake Michigan Ship Canal and Harbor Company Canal <i>See</i> Sturgeon Bay and Lake Michigan Canal.		
Stuyvesant Harbor, Hudson River, N. Y., examination and survey of shoal off.....	1277	
Sucarnoochee River, Ala., examination and survey.....	586	
Suisun Bay, Cal.:		
Channel between Carquinez Strait and Antioch, San Joaquin River, examination and survey.....	913	
Channel between Carquinez Strait and Golden Gate. <i>See</i> San Pablo Bay.		
Dredge for tributary rivers.....	409, 410, 457	
Examination and survey.....	444	
Examination and survey of San Joaquin River and Stockton Channel from San Francisco Bay to Stockton.....	1272	
Examination and survey of Suisun channel.....	1272	
Suisun Creek, Cal., examinations and surveys.....	715, 793, 893	
Sullivan Falls Harbor, Me. <i>See</i> Sullivan River and Falls.		
Sullivan Island, Charleston Harbor, S. C. <i>See</i> Charleston Harbor.		
Sullivan River and Falls, Me.:		
Examinations and surveys.....	185 ² , 590	
Improvement.....	194, 207, 744, 844, 949	
Sullivans Slough, Wash. <i>See</i> Puget Sound and tributaries.		
Sulphur River, Tex. and Ark.:		
Examinations and surveys.....	386, 648, 1021, 1131	
Improvement (sometimes under Red River).....	697, 983, 1246	
Sumpawams (Sumpawanus) Creek, or Inlet, or River, N. Y. <i>See</i> Sumpawanus, etc.		
Sumpawanus Creek, or Inlet, or River, N. Y.:		
Examination and survey.....	326	
Examination and survey of channel to.....	1277	
Improvement.....	351, 361	
Sumpwams (Sumpawanus) Creek, or Inlet, or River, N. Y. <i>See</i> Sumpawanus, etc.		
Sunken craft. <i>See</i> Wrecks.		
Sunken rocks (ledge), Portsmouth Harbor, N. H. <i>See</i> Portsmouth Harbor.		

Superior Bay, Minn. and Wis. <i>See</i> Duluth-Superior Harbor.	Page.
Superior Harbor, Wis. <i>See</i> Duluth-Superior Harbor.	
Superior Lake:	
<i>See also</i> Northern and Northwestern Lakes.	
Canal to Mississippi River, examinations and surveys-----	703, 897
Harbors of refuge on north shore, examination and survey-----	1275
Harbor of refuge on south shore, in vicinity of Keweenaw Point, Mich., examination and survey-----	1129
Harbors on, improvement-----	144, 145
Huron Lake to, including St. Marys River, Hay Lake, Neebish chan- nel, and Mud Lake, surveys-----	126, 877
Keweenaw Bay waterway. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Lac La Belle Canal, Mich., grant of public lands for construction of.	157
Portage Lake and Lake Superior canals. <i>See</i> Keweenaw Bay-Lake Superior waterway.	
Supervision of the harbor of New York, N. Y. <i>See</i> Fishing, etc., and Prevention of obstructive, etc., deposits, under New York Bay and Harbor.	
Supplemental reports. <i>See</i> Reports.	
Supplies. <i>See</i> Contracts, Expenditures, Materials, Property, etc.	
Sureties. <i>See</i> Bonds, Contracts, Labor, and Materials.	
Surface levels. <i>See</i> Gauging, under Columbia and Mississippi rivers, International Waterways Commission, under Northern and North- western Lakes, and Depths.	
Surplus fund:	
<i>See also</i> Balances, under Appropriations.	
River and harbor appropriations not required to be carried to-----	225
Unexpended balances belonging to certain discontinued improve- ments to be carried to-----	1008, 1009, 1123, 1124
Unexpended balances, certain, to be carried to; reappropriation---	225
Surveys. <i>See</i> Examinations and surveys.	
Suspension (abandonment) of certain improvements. <i>See</i> Abandon- ment, etc., and Wateree River.	
Susquehanna River, Pa. and Md.:	
Havre de Grace, Md., examinations and surveys-----	589, 692, 915
Havre de Grace, Md., improvement, including channel etc., at Bat- tery Island-----	121, 145, 152, 171, 175, 176, 177, 187, 319, 350, 356, 379, 402, 446 ² , 496, 562, 625, 692, 976, 1089, 1231
North Branch, Pa., improvement-----	319, 350, 381
North Branch, Pa., Nanticoke dam up to New York-Pennsylvania boundary, examination and survey-----	299
North Branch, Pa., Nanticoke to Pittston, examination-----	719
North Branch, Pa., Pittston to Athens, examination and survey-----	385
North Branch, Pa., Wilkesbarre dikes, examination and survey for removal-----	1019
Northumberland, Pa., below, examination and survey-----	1019
West Branch, Pa., examinations and surveys-----	422, 594
Suwanee River, Fla.:	
Examinations and surveys-----	89, 278
Improvement-----	89, 321, 343, 371, 405, 450, 501, 566, 630, 695, 771, 814, 869, 981, 1094, 1238
Inside passage to Cedar Keys, via Suwanee Sound and Derrick Island Gap, improvement-----	551, 566
Swan & Palmer, payment to-----	112
Swan Creek, Mich., examination and survey-----	327
Swan Quarter Bay, N. C., examination and survey of waterway to Deep Bay (<i>see also</i> Norfolk Harbor waterways)-----	1278
Swansboro, N. C.:	
<i>See also</i> Beaufort Harbor-New River and Norfolk Harbor water- ways.	
Waterway to New River, examination and survey-----	525
Waterway to New River, improvement-----	564, 1233
Swanton Harbor, Maquam Bay, Vt.:	
Examinations and surveys-----	209, 423, 527
Improvement-----	213, 229, 239, 256, 277, 286, 307, 333, 360

Swanton Harbor, Missisquoi River, Vt. <i>See</i> Missisquoi Bay and River.	Page.
Swash channel, New York Harbor, N. Y. <i>See</i> New York Bay and Harbor.	
Swash channel, Pamlico Sound, N. C. <i>See</i> Pamlico Sound.	
Sweany, Charles, payment to	432, 476
Swearing out of process in cases of violations of laws for protection, etc., of navigable waters	890, 1122, 1123
Swedback, E. J., dam of	1079
Sweeting (Swetting), J. Volney. <i>See</i> Swetting.	
Swetting, J. Volney, payment to	330, 477 ² , 526, 599
Swift Creek, N. C., examination and survey	525
Swinomish Slough, Wash. :	
<i>See also</i> Puget Sound and tributaries.	
Examination and survey	596
Improvement	641, 707, 790, 884, 1004, 1119, 1268
Sylvester, Isaac A., payment to	391
Symons, Maj. Thomas W., leave of absence for service in connection with New York State canals	1047
Synepuxent (Sinepuxent) Bay, Md. <i>See</i> Sinepuxent Bay.	
Syracuse, Ohio. <i>See</i> Ohio River.	

T.

Tacoma Harbor, Wash. :	
<i>See also</i> Puyallup River.	
Examinations and surveys	919, 1021
Expenditure of funds upon Puyallup waterway project contingent upon maintenance after completion without expense to U. S.	1118
Improvement	971, 1039, 1118, 1204
Tallahatchie River, Miss. :	
Examinations and surveys	278, 1016, 1129
Improvement	295, 315, 344, 372, 406, 451, 502, 568, 631, 696, 772, 871, 983, 1097, 1241 ²
Tallapoosa River, Ala. :	
Examinations and surveys	324, 325
Improvement	380, 405, 450, 501, 567
Tampa Bay and Harbor, Fla. :	
Clearwater Harbor and Cedar Keys, channel to, examination and survey	385
Clearwater Harbor to, including Boca Ceiga Bay, examination and survey (<i>see also</i> Boca Ceiga Bay)	1273
Hillsboro Bay, from turning basin to head of estuary toward Ybor City, examination and survey	1273
Hillsboro Bay and River (Tampa Bay to Tampa), examinations and surveys	793, 824, 1013
Hillsboro Bay and River (Tampa Bay to Tampa), improvement	852, 961, 1093, 1202
Improvement between Gulf of Mexico and Port Tampa, expenditure of funds contingent upon approval by Secretary of War of schedule of wharfage charges of dock companies	1093
Improvement, including channel to Port Tampa	321, 335, 363, 398, 440, 489, 551, 617, 851, 930, 942, 1026, 1037, 1093
Payment to Independent Line Steamers for damages to steamer <i>Manatee</i>	1028, 1071, 1072
St. Petersburg Harbor. <i>See</i> St. Petersburg Harbor.	
Tampa Bay to Old Tampa Bay, channel from, examination and survey	278
Tampa Bay, at Tampa, examination and survey	196
Tampa Bay, including Hillsboro River up to Tampa, examination and survey	464
Tampa Bay, mouth to Port Tampa, examinations and surveys ..	715, 797, 826
Tampa Bay to Old Tampa Bay, channel from, examination and survey	519
Tangier Harbor, Va., examinations and surveys	595, 901
Tangier Sound, Md. and Va. :	
Tangier (Cod) Harbor, Va. <i>See</i> Tangier Harbor.	
Upper (Laws) and Lower thoroughfares, Deal Island, Md. <i>See</i> Deal Island.	

	Page.
Tangipahoa River, La.:	
Examinations and surveys	197, 279, 521, 1015
Examination and survey of channels in Lake Pontchartrain to	1273, 1274
Improvement	205, 321, 344, 407
Tanyard Branch, Pearl River. <i>See</i> Pearl River.	
Tarentum, Pa. <i>See</i> Allegheny River.	
Tarpaulin Cove, Mass., examinations and surveys	645, 722
Tarpon Bayou, Fla. (leading from Anclote River to Tarpon Springs).	
<i>See</i> Anclote Harbor and River.	
Tarpon Springs, Fla. <i>See</i> Anclote Harbor and River.	
Tar River, N. C.:	
Examinations and surveys	280, 525, 718, 1130
Improvement	296,
	313, 342, 371, 404, 448, 499, 564, 627, 693, 769, 867, 978, 1090, 1233
Tarrytown Harbor, Hudson River, N. Y.:	
Examinations and surveys	524, 899
Improvement	1086, 1227
Taunton River, Mass.:	
Examinations and surveys	122, 466, 521
Fall River Harbor. <i>See</i> Fall River Harbor.	
Improvement	184, 194, 207, 218
	231, 241, 276, 285, 320, 339, 366, 402, 558, 623, 689, 762, 862, 973, 1083
Taxes, tonnage. <i>See</i> Tolls.	
Taylor's Bayou, Tex., channel connecting Port Arthur Canal with Sabine Lake, via. <i>See</i> Port Arthur Canal and Sabine River.	
Tchefuncte (Chefuncte) River, La. <i>See</i> Chefuncte River.	
Tchula Lake, Miss.:	
Examination and survey	299
Improvement (sometimes under Yazoo River)	350,
	372, 406, 451, 502, 568, 631, 696, 983, 1097, 1241
Teche Bayou, or River, La.:	
Canal to Grand Lake. <i>See</i> Charenton Canal.	
Examinations and surveys	48, 179, 298, 465, 520, 521, 589, 715, 798, 1097
Expenditure of funds between St. Martinville and Arnaudville conditioned upon deeding of land to U. S. free of cost and securing U. S. against damage claims	1241, 1242
Improvement	185, 319, 344, 406, 569, 698, 773, 872, 983, 1097, 1241
Water hyacinths, removal of. <i>See</i> Water hyacinths.	
Waterway from Franklin to Mermentau River. <i>See</i> Franklin.	
Tenants Harbor, Me.:	
Examinations and surveys	645, 1274
Long Cove. <i>See</i> Long Cove.	
Tennessee River:	
Bee Tree Shoals Canal, Ala. <i>See</i> Chattanooga, below, <i>infra</i> .	
Big Muscle Shoals Canal, Ala. <i>See</i> Chattanooga, below, etc., and Muscle Shoals Canal, <i>infra</i> .	
Black Warrior River, Ala., canal to, survey	196
Bridgeport, Ala., to Decatur, survey	874
Browns Ferry to Florence, Ala., survey	196
Chattanooga, Tenn., above, improvement	176,
	177, 195, 205, 215, 230, 239, 261, 270, 290, 316, 345, 374,
	408, 453, 505, 571, 634, 699, 775, 875, 986, 1103, 1247
Chattanooga, Tenn., below, improvement, including Livingston Point	140, 171, 175, 176, 177, 184, 195, 205,
	215, 230, 239, 261, 270, 284, 290, 316, 345, 374, 408, 453, 505, 571,
	633, 699, 775, 874, 875, 926, 986, 1040, 1103, 1136, 1204, 1247, 1294
Chattanooga Tenn., to junction of Holston and French Broad rivers, survey	571
Chattanooga, Tenn., to mouth, examination and survey	165
Chattanooga, Tenn., to Riverton, Ala., survey	874, 875
Chattanooga, Tenn., to Shellmound, surveys	874, 875
Colbert Shoals Canal, Ala., improvement, grant of land in aid of (<i>see also</i> Chattanooga, below, etc., <i>supra</i>)	44, 53, 61, 64, 73
Colbert Shoals Canal, Ala., survey	37
Coosa River, canal to, assent of Congress to act of Alabama for	26
Coosa River, canal to, survey	196
Dams for water power, rights of parties to erect, not to be impaired by provisions of law authorizing dams in Bear River	1148, 1150

Tennessee River—Continued.		Page.
Decatur, Ala., to Florence, acquisition of land, etc.....		290
Discharge measurements. <i>See</i> Gauging, under Mississippi River.		
Elk River, Ala., and, grant of land for connecting navigation of...	44, 45, 73	
Elk River shoals, Ala., head of, to Florence Rwy. bridge, examination relative to improvement by locks and dams by private parties in conjunction with development of water power.....		1247
Florence, Ala., below, improvement, grant of land in aid of (<i>see also</i> Chattanooga, below, etc., <i>supra</i>).....	44, 53, 61, 64, 73	
Florence, Ala., gauging. <i>See</i> Gauging, under Mississippi River.		
Gauging. <i>See</i> Gauging, under Mississippi River.		
Guntersville, Ala., canal to Black Warrior or Coosa River, survey...		196
Hales bar (Scott Point) lock and dam, construction of, partly by U. S. and partly by private parties (Chattanooga and Tennessee River Power Co.).....	1050, 1062, 1103, 1204,	1247
Improvement, assent of Congress to acts of Alabama for.....		26
Improvement, grant to State of Alabama of land in aid of.....		44,
	53, 54, 61, 64, 73	
Knoxville, Tenn., to Kelleys Ferry, improvement.....		124, 140
Little Muscle Shoals Canal, Ala. <i>See</i> Chattanooga, below, etc., <i>supra</i> , and Muscle Shoals Canal, <i>infra</i> .		
Mobile Bay, Ala., to, internal improvement, proceeds of sales of lands to be applied to.....		92
Moccasin bend, canal across, survey.....		875
Mouth, examination and survey.....		798
Muscle shoals, Ala., power dams, authority to construct; withholding of permits (<i>see also</i> Dams, <i>supra</i>).....	1142, 1248	
Muscle Shoals Canal, Ala., canal, dam, etc., of Muscle Shoals Power Co. (<i>see also</i> Dams, <i>supra</i>).....	903, 910, 937, 1034	
Muscle Shoals Canal, Ala., improvement, grant of land in aid of (<i>see also</i> Chattanooga, below, etc., <i>supra</i>).....	44, 53, 54, 64, 73	
Paducah Harbor, Ky. <i>See</i> Paducah Harbor.		
Riverton, Ala., below, improvement (<i>see also</i> Chattanooga, below, etc., <i>supra</i>).....	699, 874, 986, 1103,	1248
Riverton, Ala., survey.....		699
Savannah River, Ga., to, via Hiwassee River, waterway, examination and survey.....		326
Scott Point, Tenn., Hales bar lock and dam. <i>See</i> Hales bar, <i>supra</i> .		
Scott Point, Tenn., to Lock A, Muscle Shoals Canal, and to Chattanooga. <i>See</i> Chattanooga to Riverton, <i>supra</i> .		
Suck, the. <i>See</i> Chattanooga to Shellmound, <i>supra</i> .		
Tombigbee River, canal to, via Bear Creek, or River, examination and survey.....		234
Transportation route to the seaboard, survey.....		233
Warrior River, Ala. <i>See</i> Black Warrior River, <i>supra</i> .		
Water-level observations. <i>See</i> Gauging, under Mississippi River.		
Tensas River, La.:		
Examination and survey.....		325
Improvement.....	349, 407, 451, 502, 569, 632, 697, 773, 871, 983, 1098,	1242
Terraceia Cut-off, Manatee River, Fla. <i>See</i> Manatee River.		
Terrebonne Bayou, La.:		
Examinations and surveys.....	299, 465, 521, 589, 1274	
Examinations and surveys of, with a view to opening a shorter waterway between Mississippi River and Berwick Bay, Texas and Mexico. (<i>See also</i> Rio Grande River).....	521, 589, 645	
Improvement.....	319, 344, 373, 451, 502	
Texas City, Tex., channel to Galveston. <i>See</i> Galveston Bay and Harbor.		
Texas-Mexican Electric Light and Power Company.....		597
Texas, State of:		
Assent of Congress to State legislation for removal of Red River raft.....		142
Deep-water harbor on northwest coast of Gulf of Mexico, survey...		539
Dredge-and-s snag boat for improvements on coast. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.		
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.		

Thames River, Conn.:	Page.
See also New London Harbor.	
Examinations and surveys	47, 278, 1125
Improvement	23, 77, 81, 86, 152, 162, 166, 193, 207, 276, 285, 311, 339, 367, 402, 445, 495, 558, 623, 690, 763, 862, 974, 1084, 1224
The Bay, Ark. (tributary of St. Francis River), examination and survey	327
The Dalles (Fivemile)) rapids, Columbia River. See Columbia River.	
The Gut, Lake Champlain, Vt. See North and South Hero islands, under Champlain Lake.	
The Gut, Sasanoa River, Me. See Sasanoa River.	
The Lake Erie and Ohio River Ship Canal Company	1207
The Mississippi River Power Company:	
Dam above Monticello, Minn.	1174, 1283
Dam at Clearwater, Minn.	1176, 1284
The Pike Rapids Power Company, dam of	1165, 1282
The St. Cloud Electric Power Company	1189
The Weirs, N. H. See Winnepesaukee Lake.	
Third Haven Creek, or River, Md. See Tred Avon Creek, or River.	
Thomas, Kirby, dam of	1079
Thomaston Harbor, Me. See Georges River.	
Thompson, J. C., payment to	330, 477
Thoroughfare, the (connecting Roanoke and Cashie rivers), N. C., improvement	448
Thousand Island Park, N. Y., examination and survey of St. Lawrence River	1130
Threemile (Cornells) Creek, N. Y. See Cornells Creek and Landing.	
Threemile Harbor, N. Y.:	
Examination and survey	898
Examination and survey of channel between Gardiners Bay and	1277
Thunder Bay Harbor and River, Mich. See Alpena Harbor.	
Thunderbolt River (St. Augustine Creek), Ga., improvement	287
Tickfaw River, La.:	
Examination of, including tributaries	715
Examinations and surveys	299, 521
Improvement, including tributaries (Blood, Natalbany, and Poncha-toula rivers)	350, 373, 452, 503, 569, 632, 697, 773, 871, 983, 1097, 1242
Ticonderoga River, N. Y.:	
Examination and survey	325, 1017
Improvement	334, 367, 445, 495, 559
Tidal waters:	
See also Navigable waters.	
Compensation for displacement of. See Deposits and Structures.	
Tigre Bayou (St. James Parish), La., examination and survey	589
Tigre Bayou (Vermilion Parish), La., examination and survey	1015
Tillamook Bay, Oreg.:	
Examinations and surveys	468, 593, 801, 971, 1278
Improvement	494, 556, 622, 688, 761, 861, 971, 1116, 1265
Timber, etc., running of, general provisions of law regarding	889 ² , 890 ² , 893, 908, 1010
Tionesta Creek, or River, Pa., examinations and surveys	387, 594, 719
Tisdale, Louis M., construction of channel in Mobile Bay, Ala	1095
Titles, etc., to land. See Land.	
Tittabawassee River, Mich., examination and survey	716
Tiverton, R. I. See Sakonnet Harbor and River.	
Tobias (Adams) Landing Harbor, Lake Champlain, Vt., examination	648
Tohopekaliga Lake, Fla.:	
See also Florida State, canal across.	
Waterway from Kissimmee River to Gulf of Mexico, via, examina-tion and survey	894
Waterway from St. Johns River to Charlotte Harbor or Peace Creek, via, examination and survey	328
Toledo Harbor, Maumee Bay and River, Ohio:	
See also Maumee River.	
Canal to Ohio River. See Miami and Erie Canal.	
Canal to Wabash River. See Wabash and Erie Canal.	
Dredge boat for harbors on Lake Erie (see also Erie Lake)	965, 966

Toledo Harbor, Maumee Bay and River, Ohio—Continued.		Page.
Examinations and surveys	325, 354, 810, 1278	
Improvement	153, 161, 176, 177, 182, 192, 203, 213, 228, 237, 256, 272, 293, 309, 336, 364, 399, 441, 490 ² , 553 ² , 618, 685, 755, 810, 856, 930, 942, 965, 1026, 1037, 1058, 1104, 1134	
Tolls, levying, etc., of:		
Abolishment of tolls	383, 415	
Alabama-Mississippi State line to Chattahoochee River, opposite West Point, Ga., internal improvement	93	
Alabama Port, Ala., channel to deep water in Mobile Bay	1095, 1096	
Alabama, State of, certain internal improvements	44, 73, 93	
Alaska, Snake River	1119, 1120, 1268	
Aransas Bay and Pass, Tex.	296, 542, 543, 671, 854, 855	
Arkansas, State of, certain internal improvements	93	
Arkansas, State of, Red River	142	
Augusta, Minn., Mississippi River	1189	
Baltimore Harbor, Md.	15, 16 ² , 17, 20 ² , 24, 41, 83, 97, 116, 140	
Barataria Ship Canal, La.	266	
Bemidji, Minn., Mississippi River	1079, 1167	
Berrien Springs, Mich., St. Joseph River	1147	
Black River, N. C.	448	
Black Warrior River, Ala.	44	
Block Island Harbor, R. I.	547	
Brainerd, Minn., Mississippi River	427	
Brazos River, Tex., mouth	530, 854	
Buffalo Bayou, Tex.	398, 585	
Cahaba River, Ala.	44	
Canals, tolls abolished	383, 415	
Cape Fear River, N. C.	342	
Charging of tolls abolished	383, 415	
Chattahoochee River, opposite West Point, to Alabama State line, toward Jackson, Miss., internal improvement	93	
Chesapeake and Delaware Canal	29, 49	
Chesapeake and Ohio Canal	45	
Choctawhatchee River, Newton, Ala.	1146	
Clearwater, Minn., Mississippi River	1176, 1284	
Colbert Shoals Canal, Tennessee River, Ala.	44, 73	
Collection of tolls abolished	383, 415	
Coosa River, Ala.	44	
Corpus Christi and Padre Island Harbor Company	603, 657, 855, 964	
Corpus Christi Bay and Harbor, Tex.	296	
Crow Wing River, Minn.	1179	
Cumberland River, Ky., and tributaries above Burnside	1101, 1102, 1103	
Dams, levying of maintenance, etc., charges abolished	383, 415	
Delaware and Chesapeake Canal. <i>See</i> Chesapeake and Delaware Canal, <i>supra</i> .		
Delaware River	19	
Des Moines Rapids Canal. <i>See</i> Mississippi River, <i>infra</i> .		
Des Moines River, Iowa	109	
Discontinuance of tolls	383, 415	
Dismal Swamp Canal, Va. and N. C.	32, 49	
Drummond, Lake, Canal, Va. and N. C. <i>See</i> Dismal Swamp Canal, <i>supra</i> .		
Dues, tonnage, abolishment of	383, 415	
Elk River, Tenn. and Ala.	44	
Fox River, Wis., including canal (Portage) to Wisconsin River	110, 166, 180	
Galena Harbor and River, Ill.	574, 575	
Galveston Bay, Tex., Morgan Cut and Canal	398, 585	
Georgia, State of, Savannah River. <i>See</i> Savannah River, <i>infra</i> .		
Grand Rapids, Minn., Mississippi River	839, 906	
Grass River, N. Y., canal of St. Lawrence Power Co. to St. Lawrence River	975	
Green Bay-Lake Michigan Canal, Wis.	149	
Harbors and rivers. <i>See</i> Rivers and harbors, <i>infra</i> .		
Illinois and Michigan Canal, Ill.	38	
Illinois, State of, certain internal improvements	38, 93	
Improvements, private, etc.	1005	

Tolls, levying, etc., of—Continued.	Page.
Improvements, State, etc., along New Jersey coast.....	1206
Indiana, State of, certain internal improvements.....	39, 93, 106
Iowa, State of, Des Moines River.....	109
James River, Va.....	113
Kennebunk River, Me.....	17
Keweenaw Bay-Lake Superior waterway, Mich.....	148
Lac La Belle Canal, Mich.....	157
Lake Drummond Canal, Va. and N. C. <i>See</i> Dismal Swamp Canal, <i>supra</i> .	
Lake Erie and Ohio River Ship Canal.....	1207
Lake Superior Ship Canal, Railway and Iron Company Canal, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway, <i>supra</i> .	
Levying of tolls abolished.....	383, 415
Little Falls, Minn., Mississippi River.....	429, 430
Little Kanawha River, W. Va.....	342, 370, 403, 447, 497, 563
Locks, operating, etc., charges abolished.....	383, 415
Louisiana, State of, certain internal improvements.....	93, 142
Louisville and Portland Canal, Ky. <i>See</i> Ohio River, <i>infra</i> .	
Lyndon, Ill., Rock River.....	1077
Maine, State of, Kennebunk River.....	17
Maryland, State of. <i>See</i> Baltimore Harbor, <i>supra</i> .	
Massachusetts, State of, Kennebunk River (Me).....	17
Massena, N. Y., canal of St. Lawrence Power Co. to St. Lawrence River.....	975
Meekers Island, Mississippi River, Minn., lock and dam.....	170, 213
Menominee Indian Reservation, Wis., Oconto River, etc.....	254
Mermentau River, La.....	1032
Miami and Erie section of Wabash and Erie Canal.....	39
Michigan City Harbor, Ind.....	154, 16,
Michigan Lake-Sturgeon Bay Canal, Wis.....	149
Michigan, State of, certain internal improvements.....	93, 117, 148, 157, 319
Minnesota, State of, Meekers Island lock and dam.....	170, 213
Mississippi-Alabama State line to Chattahoochee River, opposite West Point, Ga., internal improvement.....	93
Mississippi River, Augusta, Minn.....	1189
Mississippi River, Bemidji, Minn.....	1079, 1167
Mississippi River, Brainerd, Minn.....	427
Mississippi River, Clearwater, Minn.....	1176, 1284
Mississippi River, Des Moines Rapids Canal.....	163
Mississippi River, Grand Rapids, Minn.....	839, 906
Mississippi River, Little Falls, Minn.....	429, 430
Mississippi River, Meekers Island, Minn., lock and dam.....	170, 213
Mississippi River, Monticello, Minn.....	1174, 1283
Mississippi River, Morrison County, Minn.....	1165, 1282
Mississippi River, Otsego, Minn.....	1044, 1146
Mississippi River, St. Cloud, Minn. (<i>see also</i> Sauk rapids, <i>infra</i>).....	424, 425
Mississippi River, Sauk rapids, Minn.....	1042, 1069, 1219
Mississippi River, Watab, Minn.....	1049
Mississippi, State of, certain internal improvements.....	93
Missouri, State of, certain internal improvements.....	93
Mobile Bay, Ala., channel from Alabama Port to deep water.....	1095, 1096
Mobile Bay, Ala., to Tennessee River, internal improvement.....	93
Mon Louis Island, Mobile Bay, Ala., channel to deep water.....	1095, 1096
Monongahela River, W. Va. and Pa.....	446
Monticello, Minn., Mississippi River.....	1174, 1283
Morgan Cut and Canal, Tex.....	398, 585
Muscle Shoals Canal, Tennessee River, Ala.....	44, 73
Navigable waters, improvement by individuals and corporations.....	1005
Navigable waters, improvement by State, etc., authorities of chan- nels along New Jersey coast.....	1206
New Shoreham, R. I. <i>See</i> Block Island Harbor, <i>supra</i> .	
Newton, Ala., Choctawhatchee River.....	1146
Nome, Alaska, Snake River.....	1119, 1120, 1268
Oconto River, Wis., and tributaries across Menominee Indian Res- ervation.....	254
Ohio River, Louisville and Portland Canal, Ky.....	31,
	50, 139, 204, 215, 222, 306, 323

Tolls, levying, etc., of—Continued.

	Page.
Ohio, State of, certain internal improvements.....	93
Otsego, Minn., Mississippi River.....	1044, 1146
Padre Island Harbor, Tex.....	603, 657, 855, 924
Patapsco River, Md. <i>See</i> Baltimore Harbor, <i>supra</i> .	
Pea River, Ala.....	1141
Pennsylvania, State of, Delaware River at Philadelphia.....	19
Philadelphia, Pa., Delaware River.....	19
Pigeon River, Minn.....	942
Pike rapids, Mississippi River, Minn.....	1165, 1282
Pond River, Ky.....	1031
Portage Canal, Wis. <i>See</i> Fox River, <i>supra</i> .	
Portage Lake and Lake Superior canals, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway, <i>supra</i> .	
Portage Lake and River Improvement Company Canal, Mich. <i>See</i> Keweenaw Bay-Lake Superior waterway, <i>supra</i> .	
Port Arthur Canal, Tex.....	983
Porto Rico, approach and entry to private wharves, piers, etc....	1171, 1172
Private, etc., improvements.....	1005
Private, etc., improvements along New Jersey coast.....	1206
Providence Plantation, R. I. <i>See</i> Rhode Island and Providence plantations, <i>infra</i> .	
Puget Sound-Lake Washington canal, Wash.....	1170, 1267, 1268
Red Lake River, Minn.....	1144, 1145
Red River, La.....	142
Rhode Island and Providence plantations, State of.....	15, 16 ^a
Rivers and harbors, improvement by individuals and corporations...	1005
Rivers and harbors, improvement by State, etc., authorities of channels along New Jersey coast.....	1206
Rockport Harbor, Tex.....	296
Rock River, Lyndon, Ill.....	1077
St. Cloud, Minn., Mississippi River (<i>see also</i> Sauk rapids, <i>infra</i>)...	424, 425
St. Croix River, Wis. and Minn.....	1083
St. Joseph River, Mich.....	1147
St. Lawrence Power Co.'s canal, St. Lawrence River to Grass River, N. Y.....	975
St. Marys Falls Canal, Mich.....	117, 319
St. Marys River, Mich. <i>See</i> St. Marys Falls Canal, <i>supra</i> .	
Sauk rapids, Mississippi River, Minn.....	1042, 1069, 1219
Savannah River, Ga.....	15, 16 ^a , 17, 20 ^a , 24
Seattle Canal, Wash.....	1170, 1267, 1268
Slack-water systems, operating, etc., charges abolished.....	383, 415
Snake River, Alaska.....	1119, 1120, 1268
South Fork, Cumberland River, Ky.....	1101, 1102, 1103
State, etc., improvements along New Jersey coast (<i>see also</i> Private, <i>supra</i>).....	1206
States admitted into the Union after 1841, certain internal improvements.....	93
Sturgeon Bay and Lake Michigan Canal, Wis.....	149
Superior Lake-Keweenaw Bay waterway, Mich. <i>See</i> Keweenaw Bay, etc., <i>supra</i> .	
Tennessee River, Muscle and Colbert shoals canals, etc.....	44, 73
Tennessee River to Mobile Bay, Ala., internal improvement.....	93
Texas, State of, Red River.....	142
Tonnage charges abolished.....	383, 415
Vermilion Bayou, La.....	1032
Virginia, State of, James River.....	113
Wabash and Erie Canal.....	39, 106
Warrior River, Ala. <i>See</i> Black Warrior River, <i>supra</i> .	
Washington Lake-Puget Sound canal, Wash.....	1170, 1267, 1268
Watab, Minn., Mississippi River.....	1049
West Point, Ga., to Alabama State line, toward Jackson, Miss., internal improvement.....	93
Wisconsin River, Wis., including Portage Canal to Fox River...	110, 166, 180
Wisconsin, State of, Fox and Wisconsin rivers, including Portage Canal.....	110, 166, 180
Wisconsin, State of, Sturgeon Bay and Lake Michigan Canal.....	149

Tolomato River, Fla. <i>See</i> St. Augustine Harbor.	Page.
Tomac Harbor, Conn.:	
<i>See also</i> Stamford Harbor.	
Examination and survey	1012
Tombigbee River, Miss. and Ala.:	
Canal to Tennessee River, via Bear Creek, or River, examination and survey	234
Columbus, Miss., above, improvement	314, 344, 372
Columbus, Miss., above and below, improvement	268, 287
Columbus, Miss., to Vienna, Ala., improvement	314, 344, 372
Columbus, Miss., to Walkers Bridge, improvement	982, 1096, 1239, 1240
Demopolis, Ala., to Columbus, Miss., examination and survey	1125
Demopolis, Ala., to Columbus, Miss., improvement	567, 630, 696, 772, 870, 1096, 1239
Demopolis, Ala., to mouth, improvement	243, 372, 567, 630, 696, 771, 870, 926, 981, 982 ² , 1096 ³ , 1201, 1239 ² , 1292
Demopolis, Ala., to mouth, Lock and Dam No. 1 (Black Warrior series), just below Demopolis. <i>See</i> Black Warrior River.	
Demopolis, Ala., to mouth, Locks Nos. 2 and 3, survey for sites	982
Fulton, Miss., to Columbus, examination and survey	209
Fulton, Miss., to Columbus, improvement	630, 696, 772, 870
Fulton, Miss., to Vienna, Ala., improvement	405, 450, 501, 502, 567
Fulton, Miss., to Warren's mill, examination and survey	352
Improvement (limits not definitely known)	208, 214, 259
Mouth to head of navigation, examination and survey	185
Nannahubba Bluff, Ala., to mouth, improvement	684
Vienna, Ala., below, improvement	314, 344, 405, 450, 502
Vienna, Ala., to Cotton Gin, Miss., examination and survey	522
Vienna, Ala., to Demopolis, improvement	372
Vienna, Ala., to Walkers Bridge, Miss., examination and survey	467
Walkers Bridge, Miss., to Fulton, improvement	501, 567, 630, 696, 772, 870
Toms River, N. J., examinations and surveys	593, 1276
Toms River village, N. J. <i>See</i> Toms River.	
Tonawanda Creek and Harbor, N. Y.:	
Examinations and surveys	326, 468, 899
Improvement	486, 549, 614, 681, 749, 848, 955
Tones Bayou, La.:	
Closure of. <i>See</i> Red River.	
Examination and survey	279
Improvement	205
Tongue Point, Columbia River, Oreg. <i>See</i> Columbia River.	
Tongue River, Mont., examinations and surveys	591, 717
Tonnage:	
Statistics. <i>See</i> Commerce.	
Tolls. <i>See</i> Tolls.	
Topeka Water and Electric Power Company	610
Topokalija (Tohopekalliga) Lake, Fla. <i>See</i> Tohopekalliga Lake.	
Torch Lake (Antrim County), Lake Michigan, Mich., examination and survey for connecting Grand Traverse Bay with, near Eastport	466
Torch Lake (Houghton County), Lake Superior, Mich.:	
Examination and survey of Torch Lake Channel	466
Exemption of, from provisions of act of 1890 for protection, etc., of navigable waters	584
Torch Light Lake (Antrim County), Lake Michigan, Mich. <i>See</i> Torch Lake.	
Totten Bay, Devils Lake, N. Dak., examination and survey	586
Totuskey River, Va.:	
Examinations and surveys	235, 1280
Improvement	322, 341, 369
Towing, raft, on the Great Lakes and connecting waters	657
Town Creek, N. C. (Beaufort County), examination and survey	388
Town Creek, N. C. (Brunswick County):	
Examinations and surveys	325, 801
Improvement	343, 867
Town Creek, S. C. (branch of Cooper River):	
<i>See also</i> Charleston Neck Canal.	
Improvement	183, 205

Town Creek, S. C. (branch of McClellanville Creek), waterway from Santee River, and to and opposite McClellanville, to Bulls Bay and Charleston, via Wando and Owendaw rivers and. <i>See</i> McClellanville.	
Town River, Mass.:	
Examination and survey-----	590
Expenditure of improvement funds conditioned upon future maintenance by State of Massachusetts (partly under Weymouth River)-----	1082, 1083
Improvement-----	763, 862, 973, 1082
Townsend Inlet, N. J., examination and survey-----	421
Townsend Sound, N. J., thoroughfare, etc., from Cape May to Great Bay. <i>See</i> Cape May.	
Tradewater River, Ky.:	
Examinations and surveys-----	327, 793, 1014
Improvement-----	349, 374, 408, 453, 505
Trail Creek, Ind. <i>See</i> Michigan City Harbor.	
Transfer of land or other property when not needed-----	1008
Transportation of refuse matter, etc. <i>See</i> Deposits.	
Transportation routes to the seaboard:	
<i>See also</i> Canals.	
Canal, etc., across Florida, and thence along Gulf coast to Mississippi River-----	245
Surveys-----	233, 243
Trappe (La Trappe) Creek, or River, Md. <i>See</i> La Trappe Creek, or River.	
Trask River, Oreg. <i>See</i> Tillamook Bay.	
Traverse Lake, Minn. and S. Dak.:	
Examination and survey of Bois de Sioux River, Big Stone Lake, and, for diversion of flood waters of Red River of the North into Minnesota River-----	1275
Examination and survey to connect with Big Stone Lake-----	421
Reservoirs. <i>See</i> Minnesota River and Red River of the North.	
Treadhaven Cr��ek, or River, Md. <i>See</i> Tred Avon Creek, or River.	
Treaty (Petty) Island, N. J., Delaware River, Pa. <i>See</i> Philadelphia, under Delaware Bay and River.	
Tred Avon Creek, or River, Md.:	
Examinations and surveys-----	298, 420
Improvement-----	320, 341
Trenton, La. <i>See</i> Ouachita River.	
Trenton, N. J. <i>See</i> Delaware Bay and River.	
Trent River, N. C.:	
<i>See also</i> Newbern.	
Examinations and surveys-----	280, 525, 917, 1277
Improvement-----	296, 313,
342, 371, 404, 448, 500, 564, 627, 693, 769, 867, 978, 1091, 1233, 1295	
Tres Palacios Bay, Tex., examination and survey of channel from Palacios to Matagorda Bay-----	1279
Trespassing upon public structures by private parties. <i>See</i> Structures.	
Tributaries, western, of Mississippi River. <i>See</i> Western, etc., rivers.	
Trinidad Harbor, Cal., examinations and surveys-----	210, 299, 519
Trinity (Galveston) Bay, Tex. <i>See</i> Galveston Bay and Harbor.	
Trinity River, Tex.:	
Dallas to the East Fork, examination-----	984
Dallas to the East Fork, payment by citizens of Dallas of money toward work of improvement-----	1099, 1100
Dallas to Fort Worth, examination and survey-----	918
Examinations and surveys (limits not defined)-----	120, 123
Improvement-----	273, 288, 315, 344, 373, 503,
569, 632, 698, 773, 872, 984, 1040, 1061, 1099, 1201, 1204, 1245, 1294	
Improvement of mouth, in connection with mouths of streams tributary to Galveston Bay. <i>See</i> Galveston Bay and Harbor.	
Magnolia to Dallas, survey-----	698
Mouth, and thence up to Magnolia, examination and survey-----	209
Mouth, examination and survey-----	186
Mouth to Dallas, examinations and surveys-----	595, 872
Mouth to Great Northern R. R. bridge, examination and survey----	299

	Page.
Triton (dredge), documenting of, as a vessel of the U. S.-----	1163
Troublesome Creek, Ky. <i>See</i> Kentucky River.	
Troutberg Bay, N. Y., examination and survey-----	524 ²
Trumbull, Gurdon, payment to-----	66
Tualitin River, Oreg.:	
Dairy Fork, survey-----	801
Examinations and surveys-----	525, 719, 801
Tuckahoe Creek, or River, Md., examinations and surveys---	300, 420, 521, 1274
Tuckers Island, N. J. <i>See</i> Flatbeach.	
Tuckerton Cove, N. J. <i>See</i> Tuckerton Creek.	
Tuckerton Creek, N. J.:	
Examinations and surveys-----	795, 898
Improvement-----	976, 1087, 1229
Tuck, Samuel B., relief, of-----	104
Tug Fork, Big Sandy River, W. Va. and Ky. <i>See</i> Big Sandy River.	
Tule (Rhett) Lake, Oreg. and Cal., changing of level-----	1066
Tumwater, Wash. <i>See</i> Olympia Harbor.	
Tunnels for mining, etc., purposes in forest reserves, rights of way----	1063
Tuolumne River, Cal.:	
Examination and survey-----	643
Improvement-----	706
Turkey Island Creek, or Bayou, Va., improvement (under James River)-	562
Turners Creek, Md., examination and survey-----	589
Turners Cut, N. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Examination-----	718
Waterway from Norfolk, Va., to sounds of North Carolina, and to Beaufort Inlet, via. <i>See</i> Norfolk Harbor.	
Turtle Bayou, Tex.:	
Examination and survey-----	900
Improvement. <i>See</i> Mouths of tributaries, under Galveston Bay and Harbor.	
Turtle Cove, Tex.:	
Channel from Corpus Christi to Aransas Pass, via. <i>See</i> Corpus Christi Bay, Harbor, and River.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
Turtle River, Ga. <i>See</i> Brunswick Harbor.	
Twelvemile Bayou, Caddo Parish, La.:	
<i>See also</i> Cypress Bayou.	
Dam and bridge across, and canal to Cross Bayou-----	934
Twelvemile Creek, Cal., examination and survey-----	643
Twelvemile (Orange) Creek, Fla. <i>See</i> Orange River, or Creek.	
Twelvemile Creek, N. Y. <i>See</i> Wilson Harbor.	
Twelve Pole River, W. Va., examination and survey-----	235
Twin City Power Company, dams of-----	933, 1217
Twin City Rapid Transit Company, dams of-----	820, 907
Twin Island, Ohio River. <i>See</i> Ohio River.	
Twin rivers, Wis. <i>See</i> Two Rivers Harbor.	
Two Harbors, Minn. <i>See</i> Agate Bay Harbor and Burlington Bay.	
Two Islands, Minn., examination and survey-----	897
Twomile Creek, Ky. <i>See</i> Kentucky River.	
Two Rivers Harbor, Wis.:	
Effect of wave action, with plans for overcoming same-----	1108
Examinations and surveys-----	186, 902, 1108, 1110
Improvement-----	191, 202, 212, 227, 236, 256, 271, 292, 311, 338, 366, 401, 492, 555, 621, 687, 758, 859, 969, 1110, 1257
Tyaskin, Md. <i>See</i> Wetipquin Creek.	
Tyaskin (Wetipquin) Creek, Md. <i>See</i> Wetipquin Creek.	
Tygarts Valley River, W. Va., examination and survey-----	388
Tying up of vessels in navigable channels. <i>See</i> Vessels.	
Tyler, Horace, relief of-----	221

U.

Umpqua River, Oreg.:	Page.
Examinations and surveys.....	187, 300, 468, 526, 719, 796, 1019
Improvement.....	195, 435, 514, 579, 789
Unexpended balances. <i>See</i> Balances, under Appropriations.	
Union Gas Company.....	537
Union Lake, Wash., waterway via. <i>See</i> Puget Sound.	
Union River, Me.:	
Examinations and surveys.....	165, 523, 794, 798
Improvement.....	184, 194, 762, 861, 930
Union River Bay, Me. <i>See</i> Union River.	
Unlawful obstructions to navigable waters. <i>See</i> Navigable waters.	
Unnavigable waters. <i>See</i> Nonnavigable waters.	
Unserviceable land or other property, disposition of.....	1008
Unworthy works:	
Directions regarding, in connection with reports of examinations and surveys. <i>See</i> Examinations and surveys.	
Discontinuance of appropriations for, recommendations regarding, to accompany annual reports.....	886
Discontinuance of certain improvements.....	1008, 1009, 1123, 1124
Discontinuance (temporary suspension) of improvement of Wateree River, S. C.....	1020
Upper Machodoc Creek, Va., examinations and surveys.....	355, 595, 1132
Upper Nyack, N. Y. <i>See</i> Hudson River.	
Upper (Laws) Thoroughfare, Deal Island, Md. <i>See</i> Deal Island.	
Urbana Creek, Va.:	
Examinations and surveys.....	234, 355
Improvement.....	295, 313, 341, 369, 497, 563, 626, 693, 768, 866, 1089
Useless land or other property, disposition of.....	1008
Use of public structures by private parties. <i>See</i> Structures.	

V.

Vacherie, St. James Parish, La. <i>See</i> Tigre Bayou.	
Valley River, Ala., waterway from Black Warrior River to Fivemile Creek, via. <i>See</i> Black Warrior River.	
Vanburen, Ark. <i>See</i> Arkansas River.	
Vandruffs Island, Rock River, Ill. <i>See</i> Rock River.	
Van Vleck, B. J., administrator of Henry Van Vleck, relief of.....	805
Vassasousa (Waccasassa) Bay, Fla., surveys for canal to St. Marys River, via St. Johns River.....	30, 54, 124
Velasco Harbor, Tex. <i>See</i> Brazos River.	
Venice, Fla. <i>See</i> Sarasota Bay.	
Venice, Ill. <i>See</i> Mississippi River.	
Vermilion Bay, Bayou (or River), and passes, La.:	
Examinations and surveys.....	298, 465, 589, 1274
Improvement.....	319, 344, 632, 698, 773, 872, 983, 1097, 1242
Locks and dam of Southwest Louisiana Rice Growers' Association.....	1032
Vermilion Harbor and River, Ohio:	
Examination and survey.....	1018
Improvement.....	78, 80, 85, 145, 153, 203, 213, 228, 238, 256, 273, 309, 336, 364, 441, 490, 553, 618, 685, 755, 926, 1104, 1248
Vermilion River, or Bayou, La. <i>See</i> Vermilion Bay, etc.	
Vermilion River, Ohio. <i>See</i> Vermilion Harbor and River.	
Vernezobie dike, or freshet bank, Savannah Harbor, Ga. <i>See</i> Savannah Harbor and River.	
Vessels:	
<i>See also</i> Bridges, Deposits in navigable waters, Dredge boats, Structures, Tolls, and Wrecks.	
Anchorage grounds in Hampton Roads, Va., and adjacent waters...	1151
Anchorage grounds in Kennebec River at Bath, Me.....	1151
Anchorage grounds in New York Bay and Harbor, Hudson and East rivers, Kill van Kull, Arthur Kill, and Newark and Raritan bays, N. Y. and N. J.....	480, 1151
Anchorage grounds in Potomac River at Washington, D. C.....	1151
Anchorage grounds, quarantine.....	1151

Vessels—Continued.	Page.
Anchorage grounds and movement of, in Chicago Harbor and adjacent waters of Lake Michigan.....	657
Anchorage grounds and movement of, in St. Marys River, Mich....	1151
Anchoring or tying up in navigable channels to detriment of navigation, prohibition against.....	889 ² , 890 ² , 893, 1010
New York Harbor, N. Y., channels to or from, fishing or dredging for shellfish prohibited.....	708
Running of logs, rafts, etc., on streams navigated by steamboats, general provisions of law regarding.....	889 ² , 890 ² , 893, 908, 1010
Speed, movement, etc., in canals and improved channels (general), regulations governing.....	711, 890, 1008, 1009, 1010
Vicksburg, Miss. <i>See</i> Mississippi River.	
Victoria, Tex. <i>See</i> Guadalupe River.	
Vidal Bayou, La.:	
Examinations and surveys.....	386, 465
Improvement.....	503, 569
Vidalia, La. <i>See</i> Mississippi River.	
Villars Bayou, La., not to be closed by Barataria Ship Canal Company..	266
Vinalhaven, Me. <i>See</i> Carvers Harbor.	
Vincent, Samuel, payments to.....	536, 600
Vincents Cove, Mass. <i>See</i> Gloucester Harbor.	
Vineyard Haven Harbor, Mass.:	
Examination for harbor of refuge (under Vineyard and Nantucket sounds).....	953
Examinations and surveys.....	466, 896
Improvement.....	485, 547, 612, 678, 745, 845
Vineyard Sound, Mass., examination for harbors of refuge.....	953
Violations of laws for protection, etc., of navigable waters. <i>See</i> Navigable waters and Penalties.	
Virginia, State of:	
Appomattox River, assent of Congress to act for improvement.....	29
James River, assent of Congress to State acts for improvement....	18, 21, 113
Voluntary service, acceptance of, forbidden, except in certain emergencies.....	394
Volusia bar, St. Johns River, Fla. <i>See</i> St. Johns River.	

W.

Wabash and Erie Canal, Ind. and Ohio:	
<i>See also</i> Miami and Erie Canal.	
Examination and survey.....	329
Grant to State of Indiana of land in aid of.....	39, 68, 91, 106
Wabash Navigation Company. <i>See</i> Wabash River.	
Wabash River, Ind. and Ill.:	
<i>See also</i> Wabash and Erie Canal.	
Canal, etc., of Mount Carmel Development Co. at Grand rapids, Mount Carmel.....	536, 537, 935
Canal to Lake Michigan, examination and survey.....	244
Extinguishment of rights, etc., of Wabash Navigation Company in Grand rapids lock and dam, etc.....	230
Logansport, Ind., to Delphi, examination and survey.....	419
Mouth to Eel River, survey.....	44
Mouth to Lafayette, Ind., survey.....	196
Mouth to Wabash, Ind., survey.....	187
Terre Haute, Ind., to Lafayette, examination and survey.....	588
Vincennes, Ind., above, improvement.....	346, 375, 409, 508, 574, 636, 703, 780, 879, 993, 994
Vincennes, Ind., below, improvement.....	205, 215, 230, 239, 260, 270, 291, 316, 346, 375, 409, 455, 508, 574, 636, 703, 780, 879, 993
Vincennes, Ind., below, survey.....	994
Vincennes Ind., to Perrysville, examination and survey.....	994
Waccamaw River, N. C. and S. C.:	
Examinations and surveys.....	300, 387, 1020
Improvement.....	322, 343, 371, 404, 449, 500, 565, 628, 694, 770, 867, 979, 1091, 1234
Waterway to Cape Fear River, examination and survey.....	354

	Page.
Waccasassa (Vassasousa) Bay, Fla., surveys for canal to St. Marys River, via St. Johns River-----	30, 54, 124
Wacissa River, Fla., examinations and surveys-----	326, 418
Waddington Harbor, N. Y.:	
Canal around rapids of St. Lawrence River, examination and survey-----	244
Examinations and surveys-----	208, 467, 718
Improvement-----	213, 229, 243, 271, 321, 334
Wading River, N. J., examination and survey-----	795
Wadsworth, E. M., payments to-----	392, 477
Wakefield, R. I. <i>See</i> Point Judith Harbor and Pond.	
Wakulla River, Fla., examinations and surveys-----	464, 1273
Wallabout channel, East River, N. Y. <i>See</i> East River.	
Wallace, Pollard &, payment to-----	1213
Walnut bend, Mississippi River, Ark. <i>See</i> Mississippi River.	
Walters, Aaron, payment to-----	283
Wando River, S. C.:	
<i>See also</i> Norfolk Harbor waterways.	
Waterway from Charleston to Santee River and to and opposite McClellanville, via Owendaw River, Bulls Bay, Alligator Creek, or River, and. <i>See</i> Charleston Harbor.	
Wappinger Creek, N. Y.:	
Examinations and surveys-----	524, 1130
Improvement-----	559, 975, 1086, 1227
Wappoo Cut, S. C.:	
<i>See also</i> Charleston-Beaufort waterway.	
Examination and survey-----	325
Improvement (sometimes included with Charleston-Beaufort waterway)-----	349, 371, 404, 449, 500, 565, 628, 694, 770, 979, 1092
War Department. <i>See</i> Appropriations, Bridges, Contracts, Estimates, Land, Navigable waters, Regulations, Reports, Rivers and harbors, and other general subjects.	
Ward, George E., relief of B. D. Greene, bondsman of-----	728
Wareham Harbor, Mass.:	
Examinations and surveys-----	328, 678, 679
Improvement-----	208, 218, 231, 241, 350, 360, 396, 436, 484, 546, 612, 678
Warehouses in the Philippines, construction of-----	1029, 1063, 1064
Ware River, Va., examinations and surveys-----	527, 720
Warren River, R. I.:	
Examination and survey-----	422
Improvement-----	444
Warrior River, Ala. <i>See</i> Black Warrior River.	
Warrior Southern Railway Company-----	948
Warroad Harbor and River, Minn.:	
Examination and survey-----	916
Improvement-----	879, 924, 970, 1111
Warsaw, Mo.:	
<i>See also</i> Osage River.	
Dam of city across Osage River-----	932
War, Secretary of. <i>See</i> War Department.	
Warwick Creek, or River, Md.:	
Examinations and surveys-----	298, 521, 589
Improvement-----	320, 341, 626, 692, 768, 865, 957, 1088, 1230
Warwick Creek, or River, Va., examination and survey-----	1132
Washington, D. C.:	
<i>See also</i> Alexandria and Chesapeake and Ohio canals and Potomac River.	
Anacostia River (Eastern Branch of the Potomac). <i>See</i> Anacostia River.	
Commissioners of the District of Columbia. <i>See</i> Commissioners, etc.	
Harbor lines. <i>See</i> Harbor lines and Anacostia and Potomac rivers.	
Rental of rooms in, by American members of International Waterways Commission-----	1282
Washington, N. C. <i>See</i> Pamlico River.	

	Page.
Washington Bayou, Miss.:	
Examination and survey-----	1275
Improvement-----	451, 502, 568
Washington Lake, Miss., examination and survey-----	1275
Washington Lake, Wash., waterway via. <i>See</i> Puget Sound.	
Washington, State of:	
<i>See also</i> King County.	
Contribution by, of funds for upper Columbia and Snake rivers---	1266
Dredge boat for harbors and coast waters-----	1266
Washita (Ouachita) River, Ark. and La. (upper portion of Black River. <i>See</i> Ouachita River.	
Waste matter, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Watab Rapids Power Company, dam of, at Watab, Minn-----	1049
Watch Hill, R. I. <i>See</i> Little Narragansett Bay and Pawcatuck River.	
Watch Hill Cove, R. I. <i>See</i> Little Narragansett Bay and Pawcatuck River.	
Waterboro, N. Y. <i>See</i> Conewango Creek.	
Water depths. <i>See</i> Depths.	
Wateree River, S. C.:	
Examinations and surveys-----	300, 325, 594, 1020
Improvement--	350, 371, 404, 449, 500, 565, 628, 694, 770, 867, 979, 1091, 1234
Improvement suspended until further action by Congress-----	1020
Water hyacinths:	
Destruction by chemical processes injurious to cattle forbidden--	1094, 1238
Destruction by mechanical, chemical, or other means authorized---	981
Destruction by mechanical means first authorized-----	869, 870, 872
In waters of Florida, appropriations for removal---	869, 870, 981, 1094, 1238
In waters of Florida, Louisiana, and other South Atlantic and Gulf States, appropriation for investigations-----	815
In waters of Louisiana, appropriation for removal-----	872
In waters of Louisiana and Texas, appropriations for removal---	981,
	1098, 1242
Water levels. <i>See</i> Gauging, under Columbia and Mississippi rivers, International Waterways Commission, under Northern and North-western Lakes, and Depths.	
Water-power, etc., dams. <i>See</i> Dams and Structures.	
Water-power, etc., plants, in forest reserves, rights of way-----	1063
Water-reserve lands, Mississippi River and tributaries. <i>See</i> Reservoirs under Mississippi River, and Chippewa, St. Croix, and Wisconsin rivers.	
Waters, navigable. <i>See</i> Land, Navigable waters, and Rivers and harbors.	
Waters, nonnavigable. <i>See</i> Nonnavigable waters.	
Waters River, Mass., examination and survey-----	521
Waterways. <i>See</i> Canals, etc.	
Watson, J. W., payments to-----	536, 600
Waubesa Lake, Wis., survey (under Rock River)-----	88
Waukegan Harbor, Ill.:	
Donation to U. S. of right of way, etc-----	322
Examinations and surveys-----	208, 298, 894
Improvement-----	124, 322, 336, 364,
	399, 441, 491, 553, 619, 685, 756, 856, 966, 1039, 1058, 1112, 1259
Wausaugoning Bay, Minn., examination and survey-----	353
Wave action at certain harbors on Lake Michigan. <i>See</i> Michigan Lake.	
Weakeyever (Wekiva) River, Fla. <i>See</i> Wekiva River.	
Weehawken, N. J. <i>See</i> New York Bay and Harbor.	
Weepecket rock, Buzzards Bay, Mass.:	
Examination and survey-----	1015
Improvement-----	1082
Weetee Lake, S. C., examination and survey-----	900
Weir Passage, Va., waterway from Franklin to Cape Charles, via. <i>See</i> Franklin.	
Weir River, Mass., examination and survey-----	521
Weirs. <i>See</i> Structures.	
Weirs, The, N. H. <i>See</i> Winnepesaukee Lake.	
Wekiva River, Fla., examinations and surveys-----	418, 1273

Wekiwa (Wekiva) River, Fla. <i>See</i> Wekiva River.	Page.
Weldon, N. C. <i>See</i> Roanoke River.	
Weller, Samuel, relief of-----	99
Welles Harbor, Midway Island, examination and survey-----	1133
Welles, Henry S., relief of-----	222
Wellfleet Harbor, Mass. :	
Examination and survey-----	466
Improvement-----	208, 485, 547
Wells Harbor, Me. :	
Examination and survey-----	196
Improvement-----	208
Wells Island, Ohio River. <i>See</i> Ohio River.	
Wenona, Md. <i>See</i> Lower Thoroughfare, under Deal Island.	
Wepauwog River, Conn. <i>See</i> Milford Harbor.	
West Bay City, Mich. <i>See</i> Saginaw River.	
West Branch, Newtown Creek, N. Y. <i>See</i> Newtown Bay and Creek.	
West Branch, Patapsco River, Md. <i>See</i> Patapsco River.	
West Branch, Susquehanna River, Pa. <i>See</i> Susquehanna River.	
West Branch, Westport River, Mass. <i>See</i> Westport Harbor and River.	
Westbrook Harbor, Conn., survey-----	47
Westchester Creek, N. Y., examinations and surveys-----	593, 899
West Chop, Vineyard Haven, Mass. <i>See</i> Vineyard Haven Harbor.	
West, David, payment to-----	1219
West End, La. <i>See</i> Pontchartrain Lake.	
Westerly, R. I. <i>See</i> Pawcatuck River.	
Western Branch, Elizabeth River, Va. <i>See</i> Elizabeth River and Norfolk Harbor.	
Western, northern, and northwestern rivers :	
Northern and northwestern rivers, examinations and surveys-----	185, 195
Western and northwestern rivers, employment of civil engineers--	168
Western and northwestern rivers, examinations and surveys-----	151,
160, 188, 266	
Western rivers, construction and operation of snag boats-----	152
Western tributaries of Mississippi River, including those north-	
west of Ohio River, surveys-----	21, 22
Western Seamen's Friend Society, use of south pier at Chicago, Ill.---	602, 728
West Farms tidewater creek, N. Y. <i>See</i> Bronx River.	
West Fork of South Branch, Chicago River, Ill. <i>See</i> Chicago Harbor and River.	
West Fork River, W. Va., examination and survey-----	822
West Fork, White River, Ind. <i>See</i> White River.	
West Galveston Bay, Tex. :	
Examinations and surveys-----	595
Improvement-----	617, 684, 753
Improvement of mouths of tributaries. <i>See</i> Galveston Bay and Harbor.	
Waterway from Brazos River to Aransas Pass and to Sabine Pass, via. <i>See</i> Brazos River.	
Waterway from Galveston Bay to Brazos River, via Galveston and Brazos Canal and. <i>See</i> Mouths of tributaries and Waterway, etc., under Galveston Bay and Harbor.	
Waterway from the Rio Grande to Mississippi River. <i>See</i> Rio Grande River.	
West Glasgow, Mo. <i>See</i> Glasgow and West Glasgow, under Missouri River.	
West (Hay) Harbor, Fishers Island, N. Y., examination and survey---	1130
West Haven Harbor, West River, Conn. <i>See</i> New Haven Harbor.	
West, John, payment to-----	1219
West Neck River, Va., examination and survey-----	595
West Norfolk, Va. <i>See</i> Norfolk Harbor.	
Weston, Mo. <i>See</i> Missouri River.	
West Pearl River, La. <i>See</i> Pearl River.	
West Point, Ga., to Alabama State line, toward Jackson, Miss., proceeds of sales of lands to be applied to internal improvement from-----	92
West Point, Va. <i>See</i> York River.	

	Page.
Westport Harbor (Saugatuck Harbor and River), Conn.:	
Examinations and surveys	386, 643, 721
Improvement	37, 54, 77, 81, 86, 166, 184, 623, 690, 747, 1224 ²
Saugatuck Harbor and River, examination and survey	34
Saugatuck River, examination and survey	586
Westport Harbor and River, Mass.:	
Examinations and surveys	279, 522, 896
Improvement	436, 547, 613
Westport Point Harbor, Mass. <i>See</i> Westport Harbor and River.	
Westport River, Mass. <i>See</i> Westport Harbor and River.	
West River, New Haven, Conn. <i>See</i> New Haven Harbor.	
West Superior, Wis. <i>See</i> Duluth-Superior Harbor.	
Wetipquin (Tyaskin) Creek, or River, Md.:	
Examinations and surveys	385, 521, 896, 1128
Improvement	957, 1088, 1230
Weymouth River, Mass.:	
Back River, examinations and surveys	590, 799
Examination and survey (limits not defined)	521
Fore River, examination and survey	1015
Fore River, expenditure of improvement funds below Quincy Point conditioned upon future maintenance above that point by State of Massachusetts	1082, 1083
Improvement	558, 623, 689, 762, 862, 973, 1082, 1222
Whale Creek, N. J., examination	646
Wharves. <i>See</i> Structures.	
Whatcom Creek waterway, Bellingham, Wash. <i>See</i> Bellingham Bay and Harbor.	
Whatcom (Bellingham) Harbor, Wash. <i>See</i> Bellingham Bay and Harbor.	
Wheeler, Eben S., superintendent St. Marys Falls Canal, Mich., suit against	818
Wheeler, Geo. F., payment to	283
Whitefish River, Mich., examination at mouth of Little Bay de Noc (Noquette)	716
Whitehall Harbor, N. Y.:	
<i>See also</i> Four Channels and Narrows, etc., under Champlain Lake.	
Examination and survey	422
Improvement	77, 79, 85, 925
Whitehead Brothers Company, payment to	834
White Lake, Mermentau River, La. <i>See</i> Mermentau River.	
White Lake Harbor, Mich.:	
Improvement	162,
176, 177, 182, 191, 202, 212, 228, 237, 255, 272, 292, 310, 337,	
365, 400, 442, 491, 554, 620, 686, 756, 858, 968, 1107, 1252	
Maintenance of depth sufficient to accommodate dredge <i>Gillespie</i>	1252
Survey	156
White Oak River, N. C.:	
Examinations and surveys	355, 385, 525, 593, 1277
Waterways via. <i>See</i> Beaufort Harbor-New River and Norfolk Harbor waterways, and Swansboro.	
White Point, Potomac River, Va. <i>See</i> Colonial Beach, under Potomac River.	
White River, Ark. and Mo.:	
Augusta Narrows, Ark., examination and survey and improvement.	1246
Batesville, Ark., to Buffalo shoals (locks and dams), examinations and surveys	797, 1101
Buffalo Fork, examination and survey	797
Buffalo Fork, improvement	874
Buffalo shoals to mouth of James Fork, examination and survey	196
Clarendon, Ark., and lower river, examination and survey	585
Devall Bluff, Ark., Memphis and Little Rock R. R. bridge near, examination and survey	385
Examinations and surveys (limits not defined)	62, 79, 82, 186, 407, 452
Gauging. <i>See</i> Gauging, under Mississippi River.	
Lock No. 1, right of way, etc., of St. Louis, Iron Mountain and Southern Rwy. across U. S. lands	1288

White River, Ark. and Mo.—Continued.	Page.
Lock No. 3, right of way, etc., of White River Rwy. across U. S. lands	944
Lock and Dam No. 1, canal and power stations of Batesville Power Co	1188
Lock and dam of J. A. Omberg, jr., or others above Lock No. 3	1194
Open-channel improvement	194,
214, 229, 258, 269, 290, 295, 315, 320 ² , 345 ² , 373 ² , 380,	
407, 452, 504, 570, 633, 698, 774, 873, 985, 1101, 1246 ²	
Slack-water improvement	873, 923, 930, 985, 1101, 1246
Upper (i. e., above mouth of Black River), examination and survey	714
White River, Ind.:	
East and West forks, examination and survey	279
Examinations and surveys	279, 703
Improvement	296, 316, 346, 376, 409, 456, 509, 574, 636, 703, 780
White River, Mich. <i>See</i> White Lake Harbor.	
White River, Wash. <i>See</i> Duwamish River.	
White River Harbor, Mich. <i>See</i> White Lake Harbor.	
White River Railway Company. <i>See</i> White River, Ark and Mo.	
Wickford Harbor, R. I.:	
Examinations and surveys	208, 648, 723, 1278
Improvement	217, 232, 746
Mill Cove, examination and survey	1020
Wickliffe Harbor, Ky. <i>See</i> Mississippi River.	
Wicomico River, Md. (on eastern shore):	
Examinations and surveys	387, 521, 1128
Improvement	206,
216, 230, 240, 259, 267, 286, 312, 341, 403,	
562, 626, 692, 767, 910, 957, 1089, 1231	
Wicomico River, Md. (on western shore), examination	646
Wicomico River, Va. (Northumberland County). <i>See</i> Great Wicomico River.	
Wilhoite bend, Missouri River, Mo. <i>See</i> Missouri River.	
Wilkesbarre, Pa. <i>See</i> Susquehanna River.	
Willamette Falls Canal, Oreg. <i>See</i> Willamette River.	
Willamette River, Oreg.:	
Albany, opposite, examination and survey	1019
Clackamas rapids, examination and survey	594
Corvallis, examination and survey	594
Oregon City, above, examinations and surveys	187, 647
Portland, above, transfer of funds to Long Tom River	883
Portland, at and above, improvement	195,
218, 232, 242, 258, 274, 294, 319, 348, 379, 410, 458,	
514, 579, 641, 707, 789, 814, 926, 1002, 1116, 1265	
Portland, at and below, examinations and surveys	593, 899
Portland, at and below, improvement	154, 163
171, 175, 176, 177, 184, 208, 218, 232, 242, 257, 274, 294, 319, 348,	
378, 410, 458, 514, 579, 641, 707, 788, 883, 1002, 1117, 1202, 1265	
Portland to Eugene, examination and survey	723
Portland to Oregon City, examination and survey	1019
Ross Island, examination and survey	594
Salem, examination and survey	801
Swan Island, examination and survey	594
Willamette Falls, acquisition by United States of existing canal	899, 1019
Willamette Falls, examination for new canal	1019
Willapa Bay, Harbor, and River, Wash.:	
Bay and river up to Woodward's Landing (Willapa), examination and survey	596
Canal to Columbia River, examinations and surveys	244, 355
Improvement	642, 707, 884, 1268
Improvement, diversion of funds to North and Nasel rivers	1004
River, examination and survey (limits not defined)	423
River (mouth) and Mailboat Slough, examination and survey	803
River, South Bend to Raymond, examination and survey	1132
Williams & Bangs, Barker, claims of	237

	Page.
Williams, Barker &, claims of-----	237
Williams, George, relief of representatives of-----	284
Willoughby, Ohio. <i>See</i> Chagrin River.	
Willow Island, Ohio River. <i>See</i> Ohio River.	
Willow River, Minn., examination and survey (under Mississippi River reservoirs)-----	996
Willow River, Wis., examination and survey (<i>see</i> Hudson Harbor)-----	596
Willow Slough, Ill. <i>See</i> Mississippi River.	
Wilmington (San Pedro) Harbor, Cal.:	
Inner harbor, examinations and surveys-----	797, 893, 1272
Inner harbor, improvement-----	195, 208, 218, 242, 274, 293, 319, 338, 366, 401, 444, 493, 555, 622, 760, 970, 1115, 1204, 1264, 1294
San Pedro Bay, deep-water harbor between points Dume and Capistrano, examination and survey-----	555
San Pedro Bay, deep-water harbor, etc., examinations and sur- veys-----	463, 622, 759, 806, 810, 811, 1272
San Pedro Bay, deep-water harbor, etc., improvement-----	759, 829, 840, 940, 1025, 1037, 1057, 1134, 1199, 1291
Wilmington Harbor, Christiana River, Del.:	
<i>See also</i> Brandywine Creek, or River.	
Examinations and surveys-----	308, 328, 550, 682, 715
Improvement-----	78, 81, 86, 184, 206, 216, 231, 241, 256, 277, 286, 308, 349, 362, 397, 438, 487, 550, 615, 682, 750, 827, 849, 930, 956, 1088, 1230
Wilmington Harbor, N. C. <i>See</i> Cape Fear River.	
Wilmington Lagoon, Cal. <i>See</i> Wilmington Harbor.	
Wilson Harbor, N. Y.:	
Examination and survey-----	219
Improvement-----	243, 255, 321, 334, 362, 437, 487, 747, 848, 955
Improvement discontinued-----	1123
Wilson, Point, Cal. <i>See</i> San Pablo Bay.	
Wilsons Point Harbor, Conn.:	
<i>See also</i> Norwalk Harbor and River.	
Improvement-----	485, 548
Wincey (Winsey) Bayou, La. <i>See</i> Winsey Bayou.	
Winchester and Potomac Railroad Company, right of way at Harpers Ferry, W. Va-----	65
Windmill Island, Delaware River, Pa. <i>See</i> Philadelphia, under Dela- ware Bay and River.	
Winnebago Lake, Fox River, Wis. <i>See</i> Fox River.	
Winnepesaukee Lake, N. H.:	
At The Weirs, examination and survey-----	421
Examination and survey (purpose or location not stated)-----	322
For placing buoys, examination and survey-----	234
Improvement-----	322, 338
Outlet, examination and survey-----	298
Winnibigoshish Lake, Minn., reservoir. <i>See</i> Reservoirs, under Missis- sippi River.	
Winnipiseogee (Winnepesaukee) Lake, N. H. <i>See</i> Winnepesaukee Lake.	
Winona, Minn. <i>See</i> Mississippi River.	
Winsey Bayou, La., examination and survey-----	279
Winthrop Cove, Thames River, Conn. <i>See</i> New London Harbor.	
Winthrop Harbor, Mass.:	
Examinations and surveys-----	466, 896
Great (Winthrop) Head. <i>See</i> Boston Harbor.	
Improvement-----	466, 484, 547, 613
Winthrop Harbor, Mo. <i>See</i> Missouri River.	
Winthrop (Great) Head, Boston Harbor, Mass. <i>See</i> Boston Harbor.	
Winyah Bay, S. C.:	
<i>See also</i> Norfolk Harbor and Santee River waterways.	
Examinations and surveys-----	353, 423, 488
Improvement-----	439, 488, 551, 616, 682, 751, 810, 828, 840, 927, 940, 1025, 1037, 1057, 1091, 1134, 1234, 1291
Sampit River and Georgetown Harbor, including, examination and survey-----	899, 1020
Use of appropriations for, in improvement up to Georgetown-----	922, 958
Waterway to Dismal Swamp Canal, N. C., survey-----	82

	Page.
Wisconsin Entrance (or Entry), Wis. <i>See</i> Duluth-Superior Harbor.	
Wisconsin River, Wis.:	
<i>See also</i> Reservoirs, under Mississippi River.	
Examinations and surveys, including connection with Fox River--	88,
	156, 165
Flowage, damages, improvement of Fox River and, investigation and adjustment of, payment of judgments and awards, limitation as to bringing of suits, etc.-----	252, 283, 330, 331, 392, 426, 431, 432, 433
	434, 472, 473, 474, 475, 476, 477, 535, 536, 599, 600, 654, 670 ² , 727
Green Bay and Mississippi Canal Co., acquisition by U. S. of property and rights of-----	180, 201, 202
Improvement-----	163
	180, 183, 201, 202, 212, 227, 236, 252, 260, 272, 283, 292, 318,
	330, 331, 348, 375, 392, 400, 426, 431, 432, 433, 434, 455, 472,
	473, 474, 475, 476, 477, 508 ² , 535, 536, 599, 600, 654, 670 ² , 727, 779
Improvement, including canal (Portage) to Fox River, grant to State of land in aid of-----	110, 114, 127, 130, 137, 166
Land, etc., needed in improvements, for right of way or for flowage, purchase of-----	227
Lands and materials needed in improvements may be taken and used-----	252
Portage to Merrill, examination and survey-----	387
Portage to mouth, examination and survey-----	455
Property and rights of U. S., investigation of character and limitations, with description, regarding improvement of Fox River and-----	779
Reservoirs at headwaters, examinations and surveys-----	263, 280, 294
Reservoirs at headwaters, railroads granted right of way through flowage lands, etc-----	251, 532, 536
Reservoirs at headwaters, restoration to public domain, subject to rights of flowage, etc., of lands heretofore withdrawn from market-----	544, 1076
Transportation route to the seaboard, via, survey-----	233
Wisconsin, State of:	
Fox and Wisconsin rivers improvement, including their connection by canal (Portage), grant of land for-----	110, 114, 127, 130, 137, 166
Grant River, improvement, grant of land for-----	101
Milwaukee and Rock River Canal, adjustment of claims of canal company, and of the canal land-grant accounts with the U. S.-----	145
Rights of way, etc., through certain water-reserve lands, Mississippi River and tributaries, granted to railroads-----	251, 532, 536
Sturgeon Bay and Lake Michigan Canal, grant of public lands for construction of-----	149, 198
Withlacoochee River, Fla.:	
Examinations and surveys-----	234, 299, 696, 715, 797, 1126
Improvement-----	343, 405, 450, 501, 567, 696, 981, 1094, 1238
Removal of water hyacinths. <i>See</i> Water hyacinths.	
Witlee, Daniel T., and others, relief of (under Red River)-----	112
Wittenberg, Mo. <i>See</i> Mississippi River.	
Wolf Lake and River, Ill. and Ind.:	
Examinations and surveys-----	234, 300, 419, 644, 798
Improvement-----	756
Improvement discontinued-----	1008, 1009
Wolf River, Miss.:	
Examinations and surveys-----	646, 1129
Improvement-----	1240
Wolf River, Tenn.:	
Examinations and surveys-----	648, 719
Improvement (sometimes under Memphis Harbor) by Mississippi River Commission-----	704, 785, 999
Improvement, etc., by Mississippi River Commission, authority for allotment to, of funds from appropriations for Mississippi River between Ohio River and Head of Passes-----	1114, 1261
Wolf (Ahnapee) River, Wis. <i>See</i> Algoma Harbor.	
Wolf River (tributary of Fox River), Wis.:	
Examinations and surveys-----	279, 299
Improvement (under Fox River)-----	779, 878, 993

	Page.
Wolverton, Hiram, relief of-----	65
Woodbridge Creek, N. J.:	
Examinations and surveys-----	279, 898
Improvement-----	294, 312, 340, 368, 975, 1087, 1228
Woodbury Creek, N. J.:	
Dike in Delaware River at (under Cooper Creek)-----	765
Improvement-----	380
Wood Island Harbor, Me., examination and survey-----	420
Wood River, Oreg., examination and survey-----	468
Woodsburg channel, Hempstead Bay, south shore of Long Island, N. Y.	
<i>See</i> Hempstead Bay.	
Woods Hole Harbor and channel, Mass.:	
Examinations and surveys-----	218, 279, 645, 722
Improvement-----	120, 295, 367, 397, 436, 734, 745, 845, 952, 1082 ² , 1204
Little Harbor, examinations and surveys-----	722, 1015
Woodwards Landing (Willapa), Wash. <i>See</i> Willapa Bay, Harbor, and River.	
Wormer, Daniel, relief of-----	143
Worn-out property, disposition of-----	1008
Worth Lake, Fla.:	
<i>See also</i> Palmbeach.	
Waterway to Jupiter Inlet and St. Johns River, examination and survey-----	418
Worthless property, disposition of-----	1008
Worton Creek and Harbor, Md., improvement-----	206
Wrangell Narrows, Alaska:	
Examination and survey-----	1012
Examination and survey of Dry Straits for channel to-----	1272
Wrecks:	
General provisions of law regarding removal of-----	329,
383, 583, 889 ³ , 890 ² , 891, 892, 893, 1010	
Permanent indefinite appropriations for removal of-----	329, 330, 891, 892
Removal of, in emergent cases-----	892, 893, 1010
Wrecked materials and other refuse, depositing of, into navigable waters. <i>See</i> Deposits, etc.	
Wrecks, the, Savannah Harbor, Ga. <i>See</i> Savannah Harbor.	
Wright, Judd, dam of-----	1179
Wyandotte, Mich. <i>See</i> Detroit River.	
Wyoming, State of, examination for reservoirs-----	796

Y.

Yadkin River, N. C.:	
Examinations and surveys-----	278, 467
Improvement-----	297, 320, 342, 370, 415, 416, 448, 500, 564, 627
Yalobusha River, Miss.:	
Examinations and surveys-----	298, 384, 717, 1016
Improvement-----	350, 372, 406, 451
Yamhill River, Oreg.:	
Examinations and surveys-----	219, 233, 593, 647, 723, 1019
Improvement-----	319, 348, 379, 641, 707, 789, 814, 1002, 1116, 1265
Transfer to Long Tom River of funds from joint appropriation for Willamette River and-----	883
Yankton, S. Dak. <i>See</i> Missouri River.	
Yaquina Bay, Harbor, and River, Oreg.:	
Bay and harbor, examinations and surveys-----	647, 719, 733, 860
Bay and harbor, improvement-----	323,
350, 366, 401, 444, 494, 556, 622, 688, 733, 761, 860, 923	
Bay and harbor, improvement to be discontinued-----	1123, 1124
River, examinations and surveys-----	796, 1019
Yazoo City, Miss. <i>See</i> Yazoo River.	
Yazoo Pass, Miss., examinations and surveys, including connection with Mississippi River-----	389, 421

Yazoo River, Miss.:	Page.
Examinations and surveys	210, 568
Improvement	214, 240, 258, 268, 289, 314, 344, 372, 406, 451, 502, 568, 631, 697, 772, 871, 983, 1097, 1241
Mouth and Vicksburg Harbor. <i>See</i> Vicksburg Harbor, under Mississippi River.	
Ybor City, Fla. <i>See</i> Tampa Bay and Harbor.	
Yellow Mill Pond, Bridgeport, Conn. <i>See</i> Bridgeport Harbor.	
Yellow River, Fla., survey	89
Yellow River, Ga., examination and survey	587
Yellowstone River, Mont. and N. Dak.:	
Examinations and surveys	278, 300, 591
Improvement	294, 323, 348, 378, 409, 412, 457, 787, 902
Improvement discontinued	1008, 1009
Reservoir dams	1080
Yellowwater (Yellow) River, Fla. <i>See</i> Yellow River.	
York Harbor and River, Me.:	
Examinations and surveys	420, 1015
Improvement	435, 483, 545, 611, 1081
York River, Va.:	
Examination and survey	300
Improvement	322
	341, 369, 403, 447, 497, 563, 626, 693, 768, 866, 977, 1089, 1231
York Spit, Chesapeake Bay, Va., channel through (included in project for Baltimore Harbor, Md.)	1088, 1089, 1203, 1230, 1293
Youghiogheny River, Pa.:	
Examinations and surveys	219, 233, 243, 325, 384, 899, 1278
Extension of Chesapeake and Ohio Canal from Cumberland, Md., to Ohio River, via, surveys	233, 243
Youngs Bay, Columbia River, Oreg. <i>See</i> Columbia River.	
Youngs River, Oreg.:	
Examinations and surveys	353, 526
Improvement	579
Yuba River, Cal.:	
<i>See also</i> California Débris Commission, California State, and Feather River.	
Examination and survey	418
Examination and survey of Feather River and tributaries, including, with a view to improvement in conjunction with State of California	1116
Yuma, Ariz. <i>See</i> Colorado River.	

Z.

Zambro (Zumbro) River, Minn. <i>See</i> Zumbro River.	
Zanesville, Ohio. <i>See</i> Muskingum River.	
Zumbro River, Minn., examination and survey	156

KF 2531 A3 1907

Author

U.S. Laws, Statutes, Etc.

Vol.

Title

Laws Relating to the Improve-
ment of Rivers & Harbors. Vol. 1

Copy

1790-1889

Date

Borrower's Name

